new glass & fiber optics

OPTICAL GLASS DATA BOOK

株式会社住田光学ガラス

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１　光学ガラスの名称　GLASS NAME / TYPE

光学ガラスの名称は、6桁の数値で表示されています。すなわち、最初の3桁は屈折率（nd）の小数点以下3桁を表わし、後の3桁はアッベ数（νd）3桁を表わしています。さらに、nd-νd光学ガラス一覧表により、ショット社によって分類され、名付けられた硝種名か、または弊社によって名付けられた硝種名が併記され、次の様に表示されています。硝種名が”K-”で始まる材料は鉛(Pb)とヒ素(As)を含みません。

例えば　nd＝1．51633　νd＝64．1の場合
516641
SCHOTT Type
K-BK7
nd＝1．55920　νd＝53．9の場合
559539
K-BPG2

ただし、SCHOTT Type と表示してある場合、ショット社の光学ガラスと同じ特性を示すものではありませんのでご注意下さい。

Each glass type is identified by its mean Index of refraction, nd, and its constringent value, νd. A six digit reference number is extracted from the first three decimal of the nd and the second three from the same of νd. The nd-νd diagram shows the grouping of glass according to their optical properties. Glass names are indicated in accordance with a grouping by SCHOTT (indicating “SCHOTT Type” or SUMITA’s name whose glass types are originally developed by us). “K-” are eco-friendly glass made of lead(Pb) and Arsenic(As) free materials.

Example: nd = 1.51633　νd = 64.1
516641
SCHOTT Type
K-BK7
nd = 1.55920　νd = 53.9
559539
K-BPG2

２ 光学的性質 OPTICAL PROPERTIES

２．１ 屈折率 Refractive Indices

屈折率は１３本のスペクトル線に対して、小数点以下５桁までの数値でいくつかの製造ロットの平均値が表示されています。又、データシートの屈折率の欄には、各スペクトル線の記号の右側にスペクトル線の波長がnmの単位で、小数点以下第２位を4捨5入して表示されています。なお、内部透過率（10mm）が50%以下のスペクトル線に対する屈折率は、測定精度の都合上、表示されていません。

Refractive index values, n, are quoted per 13 spectral wavelengths extending from 365.02 nm to 1014.0nm for each glass type in this catalogue. If internal transmittance at a spectral line is less than 50 %, there is no “n” indication in consideration of measurement precision.

Spectral Line	t	A’	r	C	C’	D	d
Wavelength (nm)	1013.98	768.195	706.519	656.273	643.847	589.294	587.562
Light Source	Hg	K	Hg	H	Cd	Na	He

Spectral Line	e	F	F’	g	h	i
Wavelength (nm)	546.074	486.133	479.991	435.834	404.656	365.015
Light Source	Hg	H	Cd	Hg	Hg	Hg

２．２ 分散式の常数 Constants of Dispersion Formula

分散式の常数は0．３６５～１．０１４μmの波長の範囲内でデータシートに記載されていない任意の波長に対する屈折率を求める場合に非常に有用です。次の分散式に分散式の常数(A_0～A_5)を代入して任意の波長(λ)における屈折率(n_λ)を算出することが出来ます。ただし、任意の波長はμmの単位で、小数点以下5桁までの数値をご使用下さい。

Constant of dispersion formula is very useful for calculating an “n” against a selective wavelength which is not shown in the data sheet within a range of wavelength 0.365–1.014 μm. When these constants are used with the following equation, refractive indices for wavelengths (specified in microns to an accuracy of 0.00001 μm), will be determined to an accuracy of 1×10^{-5}.

$$n_\lambda^2 = A_0 + A_1\lambda^2 + A_2\lambda^{-2} + A_3\lambda^{-4} + A_4\lambda^{-6} + A_5\lambda^{-8}$$

A_0～A_5: 分散式の常数 Constants of dispersion formula
λ: 波長(μm) Wavelength (μm)
n_λ: λ(μm)での屈折率 Refractive indices for wavelength λ(μm)

２．３　代表的光学恒数　Typical Optical Constants

代表的光学恒数として屈折率（nd, ne）、主分散（nF-nC, nF‘-nC’）、およびアッベ数(ν d,ν e)が見出し欄に表示されています。

Refractive Indices (nd, ne), Principal Dispersion (nF-nC, nF'-nC') and Abbe number (ν d,ν e) are indicated at each head line.

$$\nu d = \frac{nd - 1}{nF - nC} \qquad \nu e = \frac{ne - 1}{nF' - nC'}$$

２．４　部分分散および部分分散比　Partial Dispersion and Partial Dispersion Ratio

２．４．１　部分分散　Partial Dispersion

部分分散（nX-nY）の１２種類が、このデータシートに表示されています。

12 Partial Dispersions (nX-nY) are indicated.

２．４．２　部分分散比　Partial Dispersion Ratio

部分分散比はθ x･y とθ ’ x･y.を算出し、θ x･y が8種類、θ ’ x･y が4種類表示されています。

8 kinds of θ x.y and 4 kinds of θ 'x.y are indicated.

$$\theta x \cdot y = \frac{n_x - n_y}{nF - nC} \qquad \theta' x \cdot y = \frac{n_x - n_y}{nF' - nC'}$$

n_x, n_y: 各スペクトル線の屈折率　Refractive indices of spectra line

２．５ 異常分散性 Abnormal Dispersion

縦軸に部分分散比（θx･y）、横軸にアッベ数（νd）としたグラフ上で511605･（K7）と620363･（F2）の2硝種を選び、この2硝種を結ぶ直線を標準線とします。異常分散性は標準線とそれぞれの硝種の部分分散比との差をΔθx･y として表示されています。Δθx･y の絶対値が大きければ大きい程、異常分散性が大きいと言われ、特に2次スペクトルの除去には有用です。

Selecting 511605/(K7) and 620363/(F2) as the standard optical glass and configure a standard line with the straight line which links the location of the points of these standard optical glasses in the diagram (X-axis Abbe Value νd, Y-axis: Partial Dispersion Ratio). The Abnormal Dispersion is expressed by differences between the position of each glass material and the standard line in the diagram.
The bigger absolute value of Δθx.y, the bigger abnormal dispersion. When glass has a big abnormal dispersion value, this material has good property for removing the secondary spectral.

２．６ 内部透過率（τ） Internal Transmittance

内部透過率は光学ガラスの反射損失を含まない分光透過率のことを言います。試料厚みが3mmと10mmの反射損失を含む分光透過率より、試料厚みが10mmおよび25mmの場合の光学ガラスの内部透過率が表示されています。ただし、小数点以下第3位の数値は参考値としてご了解下さい。

The internal transmittance of the specimen of 10 mm and 25 mm are obtained from the spectral transmittance including reflection loss of specimen of 3mm and 10mm thick. The internal transmittance is calculated by following formula. However the value of 3rd decimal and under is a referential value only.

$$\mathrm{Log}\,\tau = \frac{\mathrm{Log}\,T_1 - \mathrm{Log}\,T_2}{\Delta d} \times L$$

τ: 厚さ Lmm ガラスの内部透過率
Internal transmittance of glass in the thickness of L mm

T_1, T_2: 試料の厚さ 3mm と 10mm のガラスの反射損失を含む分光透過率
Spectral transmittance including the reflection loss in thickness of 3mm and 10mm

Δd: 測定試料の厚み差 Difference in thickness of a pair of specimen

3 熱的性質 Thermal Properties

線膨張係数、ガラス転移温度および屈伏点は、炉内温度が士1℃の精度の示差熱膨張計を用いて、毎分5℃の昇温速度で試料(φ5×20mm)を加熱し、温度とガラスの伸びを測定して求めます。

The linear thermal expansion coefficient (x), the transformation temperature (Tg) and the yielding point (At) are obtained by measuring the temperature and expansion of a specimen, which is heated at a constant speed of 5℃ per minutes, with a differential dilatometer with an electric furnace with an accuracy of 士1℃.

3．1 線膨張係数(α) Linear Expansion Coefficient

線膨張係数は100～300℃の平均線膨張係数を示し、10^{-7}/℃の単位で表示されています。

Mean coefficient of linear thermal expansion $\alpha_{100\sim300℃}$, refers to average linear thermal expansion per degree centigrade at temperature range between 100℃ and 300℃. Mean coefficient of linear thermal expansion should be represented up to the first integer place with the unit of 10^{-7}/℃.

$$\alpha_{100\sim300℃} = \frac{dL}{L \times dT} + Q$$

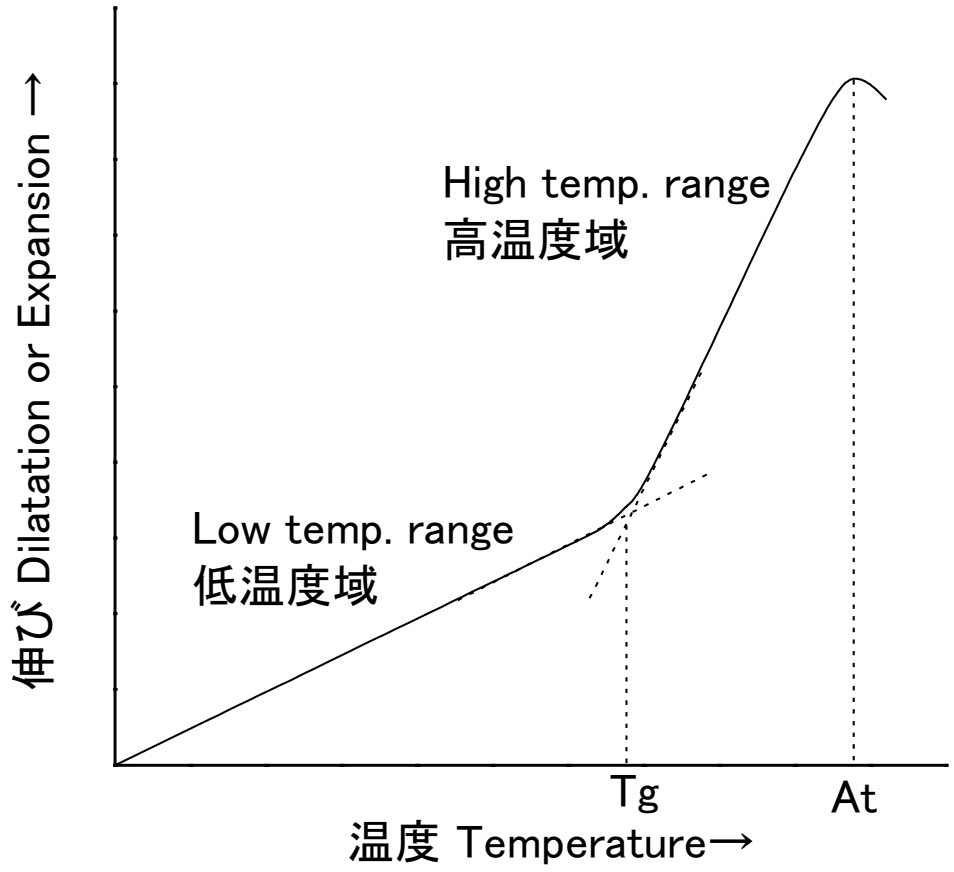
$\alpha_{100\sim300℃}$: 平均線膨張係数(℃$^{-1}$)
Mean coefficient of linear thermal expansion (℃$^{-1}$)
L: 室温における試料の長さ(cm) Specimen length (cm) at room temperature
dL: 100℃から 300℃に加熱したときの長さの変化(cm)
Specimen dilatation (cm) during heating from 100℃ to 300℃
dT: dL を測定したときの温度差(℃) Temperature interval (℃) to cause dL
Q: 100℃から 300℃の範囲における石英ガラスの平均線膨張係数(℃$^{-1}$)
Mean coefficient of linear thermal expansion of fused silica in the range from 100℃ to 300℃ (℃$^{-1}$)

３．２ ガラス転移温度（Tg） Transformation Temperature
ガラス転移温度（転移点）は図に示すように、直線部分の延長の交点に対応する温度が表示されています。

Transformation temperature is obtained by extrapolation of two thermal expansion curves until intersecting each other. Refer to Figure.

３．３ 屈伏点（At） Yielding Point
屈伏点は伸びが停止し、収縮が始まる温度が表示されています。

The yielding point (At) is the temperature where the thermal expansion stops and the glass begins to soften.



4 機械的性質 Mechanical Properties

4．1 ヌープ硬さ(Hk) Knoop Hardness

ヌープ硬さは対稜角が172度30分と130度のダイヤモンド四角錐圧子を用いて15秒間加圧し、試料の測定面に四角錐の窪みをつけたときの荷重(0．98N)を、永久窪みの長い方の対角線の長さから求めた窪みの投射面積で割った値が表示されています。又、ヌープ硬さは次の表によって分類し、その級も表示されています。

The knoop hardness is determined with the quotient of load, causing a pyramidal indentation on the testing surface with a diamond quadrangular pyramid indenter having vertex angles of 172 degrees 30 minutes and 130 degrees, divided by projected surface area, that is found from the longer diagonal length of indentation. Knoop hardness is designated with its class.

$$Hk = \frac{1.451 \times F}{L^2}$$

Hk: ヌープ硬さ Knoop hardness
F: 荷重(N) Load (N)
L: 窪みの長い方の対角線の長さ(mm) Longer diagonal length of indentation (mm)

級 Class	ヌープ硬さ Knoop Hardness
1	＜150
2	150≦ ～ ＜250
3	250≦ ～ ＜350
4	350≦ ～ ＜450
5	450≦ ～ ＜550
6	550≦ ～ ＜650
7	650≦

４．２ ビッカース硬さ（Hv） Vickers Hardness

ビッカース硬さは対面角が１３６度のダイヤモンド四角錐圧子を用いて１５秒間加圧し、試料の測定面に四角錐の窪みをつけたときの荷重（０．９８Ｎ）を永久窪みの表面積で割った値が表示されています。

The vickers hardness is determined with the quotient of load value, which is applied for 15 sec. by means of diamond quadrangular pyramid indenter with vertex angle of 136 degrees on the testing surface, causing an indentation on it, divided by the value of permanent surface area of the indentation.

$$Hv = \frac{0.189 \times F}{d^2}$$

Hv: ビッカース硬さ Vickers hardness
F: 荷重(N) Load (N)
d: 窪みの対角線の長さ(mm) Diagonal length of indentation (mm)

４．３ 摩耗度（Ha） Abrasion

摩耗度は一定形状の試料（３０×３０×１０mm）を毎分６０回転する回転円板に荷重（９．８Ｎ）を加え、２０mlの水に砥粒（＃８００）を含むラップ液で5分間ラッピングしたときの摩耗減量と同一形状の日本光学硝子工業会で指定された標準ガラスを、同一条件で試験したときとの摩耗減量の比を１００倍した値が表示されています。

The abrasion is determined with 100 times of the ratio of wear loss (volume) of specimen to one of standard sample, when pressed on a rotating disc and abraded with an abrasing compound.

$$Ha = \frac{W / S}{W_0 / S_0} \times 100$$

Ha: 摩耗度 Abrasion
W, W_0: 試料および標準試料の摩耗質量(g)
Wear mass of specimen and standard sample (g)
S, S_0: 試料および標準試料の比重
Specific gravity of specimen and standard sample

４．４　弾性係数　Elastic Modules

ヤング率（E）、剛性率（G）、体積弾性率（K）およびポアソン比（σ）は、室温において十分に徐冷された試料（１０×１０×４０mm）中を通過する5MHzの超音波パルスの縦波と横波の速度を測定し、表示されています。ただし、体積弾性率はデータシートには表示されていません。

Young's modulus, Modulus of Rigidity and Poisson ratio are measured the velocity of longitudinal / transverse waves of 5 MHz ultrasonic which passes through annealed specimen (10x10x40mm) in room temperature.

$$E = \frac{9GK}{G + 3K} \qquad G = \rho V_t^2$$

$$K = \rho V_l^2 - \frac{4}{3} G \qquad \sigma = \frac{E}{2G} - 1$$

E: ヤング率(N/m^2)　Young's modulus (N/m^2)
G: 剛性率(N/m^2)　Modulus of rigidity (N/m^2)
K: 体積弾性率(N/m^2)　Bulk modulus (N/m^2)
σ: ポアソン比　Poisson ratio
ρ: 密度(kg/m^3)　Density (kg/m^3)
V_l: 縦波の速度(m/s)　Velocity of longitudinal wave (m/s)
V_t: 横波の速度(m/s)　Velocity of transverse wave (m/s)

５ 化学的性質 Chemical Properties

５．１ 耐水性（RW） Water Resistance

耐水性は試料を粉砕し、補助網ふるい（７１０μｍ）を通過した試料粉末より標準網ふるい（５９０μｍ）を通過し、標準網ふるい（４２０μｍ）に止まった粉末をその試料の比重グラムだけ白金製カゴに入れ、石英ガラス製冷却器付き丸底フラスコ内の純水（PH6．５～７．５）８０ml中に浸し、これを１００℃の沸騰水浴中で６０分間加熱して処理します。その後１２０℃で乾燥して秤量し、試料の減量率（wt%）を算出して次の表によって分類し、その級が表示されています。

Glass is crushed to screen with 710μm sieve and the selected particle are again sieved with 590μm sieve. The glass particles should be then with test sieve opening of 420μm to collect particles at 420 – 590μm in size. Specimen weighing as much as specific weight are placed in the platinum basket. Pure water (pH6.5 – 7.5) of 80 ml is poured into the clean and dried flask (made of fused silica) coupled with condenser. Basket containing specimen is gently placed in the flask. After heating for one hour in the apparatus, the basket is removed. The basket is put in a weighing bottle and dried in an oven at 120℃ for one hour, the weighing bottle is cooled in a desiccator with silica-gel and weighed carefully together with a lid.

耐水性 Water resistance	
級 Class	減量率 (wt%) Weight loss (%)
1	＜0.05
2	0.05≦ ～ ＜0.10
3	0.10≦ ～ ＜0.25
4	0.25≦ ～ ＜0.60
5	0.60≦ ～ ＜1.10
6	1.10≦

５．２　耐酸性（RA）　Acid Resistance (RA)

耐酸性は純水の代わりに硝酸水溶液（０．０１N）８０mlを用いて、耐水性試験と同じ装置および方法で処理し、試料の減量率（wt%）を算出して次の表によって分類し、その級が表示されています。

Measurement for acid resistance should be carried out with the procedures in 5.1, using 10 m mol/1 {0.01 N} nitric acid instead of pure water already described in 5.1.

耐酸性 Acid resistance	
級 Class	減量率（wt%） Weight loss (%)
1	＜0.20
2	0.20≦ ～ ＜0.35
3	0.35≦ ～ ＜0.65
4	0.65≦ ～ ＜1.20
5	1.20≦ ～ ＜2.20
6	2.20≦

５．３　耐候性（DW）　Chemical Durability

空気中の湿度が高い場合、ガラスの表面に水蒸気が付着します。この原理を応用して試料表面に付着水をもうけ、試料表面に白ヤケを発生させて耐久性の比較を行なっています。すなわち、試料（３０×３０×３mm）と同一形状の日本光学硝子工業会指定の標準試料（重バリウムクラウンガラス）を砂目が見えない程度まで研磨し、これを同時に温度（４０±０．５℃）、相対湿度（０%）の所に1時間保持した後、直ちに温度（５０±０．５℃）、相対湿度（１００%）の所に24時間保持します。これを再度、温度（４０±０．５℃）、相対湿度（０%）の所で3時間保持した後、積分球付きのヘイズメーターでヘイズを測定し標準試料と比較して次の表によって分類し、その級が表示されています。

As shown in the Table, the degree of chemical durability of test specimen is designated by class based upon haze (%) of the test specimen with respect to that of the standard sample. The standard sample should be the dense barium crown glass specified by Japan Optical Glass Manufactures' Association.

耐候性		Chemical Durability	
級	ヘイズ（%）	Class	Haze (%)
1	標準試料より小さい	1	Lower than that of standard sample
2	標準試料と同程度	2	Roughly equal to that of standard sample
3	標準試料より大きい	3	Higher than that of standard sample

6 その他の特性 Other Properties

6．1 脈理(S)および泡(B) Striae, Bubbles

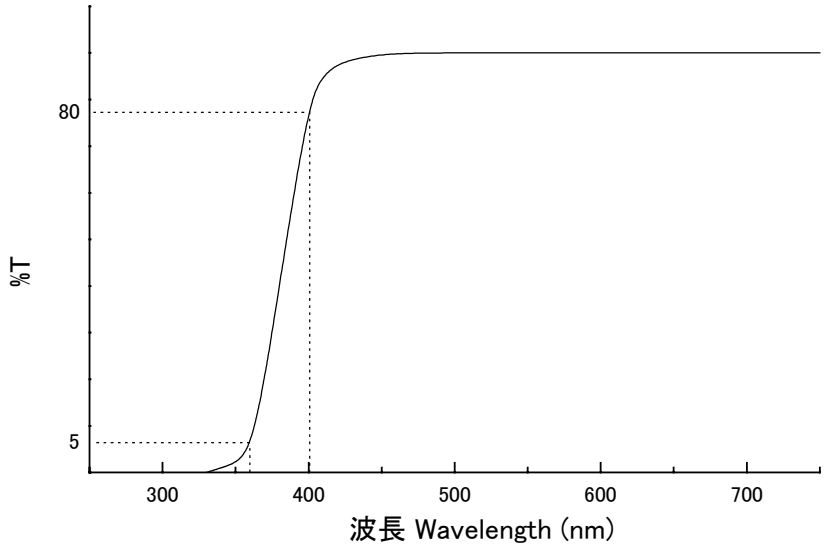
当社製品は、脈理および泡を厳密に検査していますが、硝種によっては製造上、脈理および泡を除去することが困難なものもあります。このような硝種に関して、脈理についてはSおよびSS、泡についてはBおよびBBの記号がデータシートに表示されています。この場合SSはSよりも、BBはBよりも脈理および泡を少なくすることが困難なことを表わしています。しかし、これらの記号が表示されている場合でも実用には支障ありません。

Our products are strictly inspected on the striae and bubbles, however in certain glass materials, it is difficult to eliminate them. Such glasses are indicated with remarks S for striae and B for bubbles. But there is no problem in practical use. The symbols SS and BB indicate more difficulty in removing them than S and B.

6．2 着色度(C) Coloration

着色度は厚さ10±0．1mmの光学ガラスの反射損失を含む分光透過率を200～700nmまで測定し、分光透過率が80%を示す波長と5%を示す波長をそれぞれ整数第1位で四捨五入し、10nmを単位として表示されています。例えば図のような場合、分光透過率80%の波長が400nm、5%の波長が360nmです。この場合40／36と表示されています。

Specimen should be 10±0.1mm in thickness with two opposite surface to be polished parallel. Measure spectral transmittance in the range of 200 – 700 nm. Coloration is indicated with the unit of 10nm by the wavelengths corresponding to 80 % and 5 % spectral transmittance rounded off up to the first integer place.
Example: indicated as 40 / 36



6．3　比重（S．g）　Specific Gravity
JIS　Z8807の「液中で秤量する測定方法」により、4℃の純水に対する値で表示されています。

The procedures specified in JIS Z 8807 is applied for measuring method. (JIS Z 8807: Measuring Method for Specific Gravity of Solid)

7　製品の形状区分　Forms of supply

7．1　プレス品　Pressings

7．1．1　リヒートプレス品　Re-Heat Pressings
　光学ガラス材料を、切断、再加熱してプレス成形した品です。ご要望の際は、研磨加工の取り代を含んだ必要な寸法を図面に御明記下さい。

Molding reheated glass is pressed into blanks.
Drawings are required, specifying necessary dimensions including grinding stock.

7．1．2　ダイレクトプレス品　Direct Pressings
　溶解炉から流出する光学ガラスを、直接に金型へ鋳込み、プレス成形した製品です。ご要望の際は、リヒートプレス品同様に、研磨加工の取り代を含んだ必要な寸法を図面に御明記下さい。なお、リヒートプレス品およびダイレクトプレス品の通常の加工公差は、次の表の通りですが、硝種によっては御相談させて頂く場合もございます。

Molten optical glass directly from the furnace is casted into the mold and pressed. Drawings are required, specifying necessary dimensions including grinding stock. The followings table shows our standard tolerance for re-heat pressing/direct pressing. Some alternation may occur depending on materials.

外径区分(mm) Forms of supply	リヒートプレス品公差 Tolerance of re-heat pressing		ダイレクトプレス品公差 Tolerance of direct pressing	
	厚さ(mm) Thickness	径(mm) Diameter	厚さ(mm) Thickness	径(mm) Diameter
≦18	±0.50	±0.10	±0.25	±0.08
18＜ ～ ≦30	±0.40	±0.15	±0.20	±0.10
30＜ ～ ≦50	±0.40	±0.20	±0.30	±0.13
50＜ ～ ≦100	±0.30	±0.30	±0.50	±0.15
100＜ ～ ≦150	±0.30	±0.40		
150＜	±0.50	±0.50		

７．２ 丸棒切断品 Glass Rod

棒状の光学ガラス材料から、外形を精度よく仕上げるために、さらに丸め加工した後、切断した製品です。なお、通常の加工公差は次の表の通りですが、御相談に応じます。

Blanks are cut from a precisely ground glass rod is fabricated with a centerless grinding machine. The following table shows our standard tolerance.

外径(mm) Diameter	公差 Tolerance	
	厚さ(mm) Thickness	径(mm) Diameter
3 ～ 20	±0.20	±0.05

７．３ 指定型 Custom-made

光学ガラス材料を、丸め、切断、および型落しなどして、指定の寸法に仕上げた特殊形状の製品も、指定型として御提供いたします。

Special shape/size is available upon request.

８ 改良材料 Improved material

８．１ 透過率を改良した光学ガラス Improved Transmittance Glass

透過率をより良く改良した光学ガラスも、御提供いたしています。これらの光学ガラスは、硝種名の末尾にWの記号が表示されています。

Improved Transmittance materials are indicated with the letter "W" at the end of glass code.

８．２ 化学的耐久性を改良した光学ガラス Improved Chemical Endurance Glass

化学的耐久性をより良く改良した光学ガラスも、御提供いたしています。これらの光学ガラスは、硝種名の末尾にRHの記号が表示されています。

Improved Chemical Endurance materials are indicated with the letter "RH" at the end of glass code.

対照表 COMPARISON

SUMITA					SCHOTT	
MATERIAL	CODE	PbF	AsF	PAGE	MATERIAL	CODE
K-CaFK95	434950	X	X	21	FK 54	437907
K-PFK85	486852	X	X	22	FK 51	487845
K-PFK80	497815	X	X	23	FK 52	486818
K-GFK70	569713	X	X	24		
K-GFK68	592683	X	X	25		
K-FK5	487704	X	X	26	FK 5	487704
K-PSK2	569631	X	X	27	PSK 2	569631
K-PSKn2	618634	X	X	28	PSK 53A	620635
BK1	510634	X		29	BK 1	510635
BK3	498651	X		30	BK 3	498651
K-BK7	516641	X	X	31	BK 7	517642
					BK 10	498670
BaLK3	518603			32	BaLK N3	518603
K3	518590			33	K 3	518590
K5	522596			34	K 5	522595
K7	511605			35	K 7	511604
					K 11	500614
BaK1	573575			36	BaK 1	573575
BaK2	540597	X		37	BaK 2	540597
BaK4	569560			38	BaK 4	569561
SK1	610565		X	39	SK 1	610567
SK2	607567		X	40	SK 2	607567
SK3	609589		X	41	SK 3	609589
K-SK4	613586	X	X	42	SK 4	613586
K-SK5	589612	X	X	43	SK 5	589613
K-SK7	607595	X	X	44	SK 7	607595
SK9	614551		X	45	SK 9	614552
SK10	623569		X	46	SK 10	623569
K-SK11	564608	X	X	47	SK 11	564608
SK12	583593		X	48	SK 12	583595
K-SK14	603607	X	X	49	SK 14	603606
K-SK15	623581	X	X	50	SK 15	623581
K-SK16	620603	X	X	51	SK 16	620603
K-SK18	639555	X	X	52	SK N18	639554
K-SK20	560612	X	X	53	SK 20	560612
K-SK16RH	620603	X	X	54		
K-SK18RH	639555	X	X	55		
KF2	526510			56		
KF3	515546			57	KF 3	515547
KF4	534516			58		
KF5	523509			59		
KF6	517522			60	KF 6	517522
K-BPG2	559539	X	X	61		
					BaLF 3	571529
					BaLF 5	547536
BaLF6	589532		X	62	BaLF 6	589530
SSK1	617540		X	63	SSK 1	617539

対照表 COMPARISON

SUMITA					SCHOTT	
MATERIAL	CODE	PbF	AsF	PAGE	MATERIAL	CODE
SSK2	622531		X	64	SSK 2	622532
SSK3	615511		X	65	SSK 3	615512
SSK4	618551		X	66	SSK 4	618551
SSK5	658508		X	67	SSK N5	658509
K-SSK9	620498	X	X	68		
SSKn1	649530		X	69		
LLF1	548459			70	LLF 1	548458
LLF2	541472			71	LLF 2	541472
					LLF 4	561452
LLF6	532489			72	LLF 6	532488
LLF7	549454			73	LLF 7	549454
LLF8	533460	X		74		
LF1	573427			75	LF 1	573426
LF2	589410		X	76	LF 2	589409
LF3	582420			77	LF 3	582421
LF4	578417			78	LF 4	578416
LF5	581408			79	LF 5	581409
LF6	567428			80	LF 6	567428
LF7	575413			81	LF 7	575415
BaF1	557485		X	82		
BaF3	583465		X	83	BaF 3	583465
BaF4	606439		X	84	BaF 4	606439
BaF5	607493		X	85	BaF 5	607494
BaF8	624471		X	86	BaF 8	624470
BaF9	643478		X	87	BaF 9	643480
BaF10	670472		X	88	BaF N10	670471
BaF11	667484		X	89	BaF N11	667484
BaF12	639450		X	90	BaF 12	639452
					BaF 13	669450
BaFn1	683445		X	91	BaF 50	683445
BaFn3	664492		X	92		
K-BaFn3	664492	X	X	93		
F1	626356			94	F 1	626357
F2	620363			95	F 2	620364
F3	613369			96	F 3	613370
F4	617366			97	F 4	617366
F5	603380			98	F 5	603380
					F 6	636353
F8	596392			99	F 8	596392
					F 9	620382
BaSF1	626391		X	100	BaSF 1	626390
BaSF2	664359		X	101	BaSF 2	664358
BaSF3	607402		X	102		
BaSF4	651383		X	103		
K-BaSF4	651383	X	X	104		
BaSF5	603425		X	105	BaSF 5	603425
BaSF6	668419		X	106	BaSF 6	668419

対照表 COMPARISON

SUMITA					SCHOTT	
MATERIAL	CODE	PbF	AsF	PAGE	MATERIAL	CODE
BaSF7	702411		X	107	BaSF 52	702410
BaSF8	723380		X	108		
BaSF10	650393		X	109	BaSF 10	650392
BaSF12	670392		X	110	BaSF 12	670392
SF1	717295		X	111	SF 1	717295
SF2	648339		X	112	SF 2	648339
SF3	740282		X	113	SF 3	740282
SF4	755275			114	SF 4	755276
SF4W	755275			115		
SF5	673322		X	116	SF 5	673322
SF6	805255			117	SF 6	805254
SF6W	805255			118		
SF7	640346		X	119	SF 7	640346
SF8	689312		X	120	SF 8	689312
SF9	654338		X	121	SF 9	654337
SF10	728283		X	122	SF 10	728284
SF10W	728283		X	123		
SF11	785257		X	124	SF 11	785258
SF11W	785257		X	125		
SF12	648338		X	126	SF 12	648338
SF13	741277		X	127	SF 13	741276
SF14	762265		X	128	SF 14	762265
SF15	699300		X	129	SF 15	699301
SF18	722293		X	130	SF 18	722293
SF19	667331		X	131	SF 19	667330
SFn1	720293		X	132		
SFn3	847239			133	SF 57	847238
					SF 61	751275
K-SFLD5	673322	X	X	134		
K-SFLD6	805254	X	X	135	SF L6	805254
K-SFLD10	728284	X	X	136		
K-SFLD11	785259	X	X	137	SF L56	785261
K-SFLD66	799246	X	X	138		
K-SFLDn3	847239	X	X	139	SF L57	847236
					SF 56A	785261
K-LaK6	643581	X	X	140	LaK N6	643580
K-LaK7	652583	X	X	141	LaK N7	652585
K-LaK8	713539	X	X	142	LaK 8	713538
K-LaK9	691548	X	X	143	LaK 9	691547
K-LaK10	720503	X	X	144	LaK 10	720504
K-LaK11	658573	X	X	145	LaK 11	658573
K-LaK12	678555	X	X	146	LaK N12	678552
K-LaK13	694534	X	X	147	LaK N13	694533
K-LaK14	697556	X	X	148	LaK N14	697554
K-LaK18	729547	X	X	149		
K-LaKn2	641601	X	X	150	LaK 21	641601
K-LaKn4	671572	X	X	151		

対照表 COMPARISON

SUMITA					SCHOTT	
MATERIAL	CODE	PbF	AsF	PAGE	MATERIAL	CODE
K-LaKn5	650558	X	X	152		
K-LaKn7	670517	X	X	153		
K-LaKn8	678507	X	X	154		
K-LaKn9	678533	X	X	155		
K-LaKn10	692506	X	X	156		
K-LaKn11	658534	X	X	157		
K-LaKn12	734512	X	X	158		
K-LaKn13	641568	X	X	159		
K-LaKn14	741527	X	X	160		
K-LaSKn1	755524	X	X	161	LaK 33	754524
K-LaF2	744449	X	X	162	LaF 2	744448
K-LaF3	717479	X	X	163	LaF 3	717480
LaF70	750350		X	164	LaF N7	750350
K-LaFn1	685492	X	X	165	LaF N23	689497
K-LaFn2	697485	X	X	166		
K-LaFn3	700480	X	X	167		
LaFn4	720437		X	168		
LaFn5	743492		X	169		
LaFn7	735495		X	170		
LaFn8	756476		X	171	LaF N24	757478
K-LaFn9	764403	X	X	172		
LaFn10	720421		X	173		
K-LaFn11	720460	X	X	174		
LaFn12	757317		X	175	LaF N11	757318
K-LaSFn1	806409	X	X	176		
K-LaSFn2	805396	X	X	177		
LaSFn3	800423		X	178		
LaSFn4	785437		X	179		
K-LaSFn6	802467	X	X	180		
K-LaSFn7	773496	X	X	181	LaF N28	773496
K-LaSFn8	835427	X	X	182		
K-LaSFn9	816467	X	X	183		
K-LaSFn10	816444	X	X	184		
K-LaSFn14	834372	X	X	185		
K-LaSFn16	788474	X	X	186	LaF N21	788475
K-LaSFn17	883409	X	X	187		
LaSFn19	795452		X	188		
LaSFn21	850324		X	189	LaSF N9	850322
LaSFn22	898340		X	190		
					KzF 2	529517
KzFS4	613438		X	191	KzFS N4	613443
KzFS50	740317			192		

ショットタイプの名称 Classification and names are based on SCHOTT method.
NOTES: Marked "X" in PbF and AsF columns indicates each LEAD FREE and ARSENIC FREE materials. K- materials represent Pb and As free Composition.
注: PbFとAsFの列の"X"印は、それぞれ鉛とヒ素を含まない材料です。
また、"K-"のついた硝材は鉛とヒ素の両方を含みません。

精密プレス用光学ガラス
MATERIALS FOR PRECISION MOLDING

SUMITA				
MATERIAL	CODE	PbF	AsF	PAGE
K-CaFK95	434950	X	X	21
K-PFK85	486852	X	X	22
K-PFK80	497815	X	X	23
K-GFK70	569713	X	X	24
K-GFK68	592683	X	X	25
K-CD45	693337	X	X	193
K-CD120	723292	X	X	194
K-CSK12	587596	X	X	195
K-CSK120	587596	X	X	196
K-LaFK55	694563	X	X	197
K-LaFK60	632638	X	X	198
K-PBK40	518635	X	X	199
K-PBK50	523623	X	X	200
K-PG325	507705	X	X	201
K-PG375	543629	X	X	202
K-PSFn1	907212	X	X	203
K-PSFn3	839239	X	X	204
K-PSK11	566610	X	X	205
K-PSK50	594614	X	X	206
K-PSK100	592607	X	X	207
K-VC78	669554	X	X	208
K-VC79	609578	X	X	209
K-VC80	694531	X	X	210
K-VC81	755456	X	X	211
K-VC89	810410	X	X	212
K-ZnSF8	714389	X	X	213

NOTES: Marked "X" in PbF and AsF columns indicates each LEAD FREE and ARSENIC FREE materials. K- materials represent Pb and As free Composition.
注: PbFとAsFの列の"X"印は、それぞれ鉛とヒ素を含まない材料です。
また、"K-"のついた硝材は鉛とヒ素の両方を含みません。

Optical Glass for Precision Molding

ホタロン
PHOTARON

K-CaFK95

434950	nd	1.43425	ν d	95.0	nF−nC	0.00457
K-CaFK95	ne	1.43535	ν e	94.4	nF'−nC'	0.00461

屈折率 Refractive Indices

nt	1014.0	1.42898
nA'	768.2	1.43121
nr	706.5	1.43203
nC	656.3	1.43285
nC'	643.9	1.43308
nD	589.3	1.43422
nd	587.6	1.43425
ne	546.1	1.43535
nF	486.1	1.43742
nF'	480.0	1.43769
ng	435.8	1.43986
nG'	434.1	1.43997
nh	404.7	1.44187
ni	365.0	1.44523

分散式の常数 Constans of Dispersion Formula

A0	2.0390129
A1	$-3.6337186 \times 10^{-3}$
A2	7.0961940×10^{-3}
A3	$-2.4252386 \times 10^{-4}$
A4	3.8875462×10^{-5}
A5	$-1.8511401 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	−0.1427
$\Delta\theta$ C,A'	−0.0301
$\Delta\theta$ g,d	0.0550
$\Delta\theta$ g,F	0.0385
$\Delta\theta$ i,g	0.2215

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.00387	0.00164	0.00140	0.00250
θ C,t	θ C,A'	θ d,C	θ e,C
0.847	0.359	0.306	0.547
ng−nd	ng−nF	nh−ng	ni−ng
0.00561	0.00244	0.00201	0.00537
θ g,d	θ g,F	θ h,g	θ i,g
1.228	0.534	0.440	1.175
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00410	0.00227	0.00234	0.00754
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.889	0.492	0.508	1.636

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	331 (3)	転移点 Tg (℃) Transformation Point	431
ビッカース硬さ Hv Vickers Hardness	348	屈伏点 At (℃) Yielding Point	450
磨耗度 Ha Abrasion	500	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃)	167
ヤング率 E (10^8N/m^2) Young's Modulus	718	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	279		
ポアソン比 σ Poisson Ratio	0.287	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	BB
耐水性(粉末法) RW Water Resistance	2	着色度 C Color Degree	33/28
耐酸性(粉末法) RA Acid Resistance	4	比重 S.g Specific Gravity	3.54
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270	0.02 1	
280	0.06 0	
290	0.15 8	
300	0.32 9	0.06 2
310	0.54 1	0.21 5
320	0.73 4	0.46 2
330	0.86 1	0.68 9
340	0.93 3	0.84 2
350	0.97 0	0.92 7
360	0.98 4	0.96 1
370	0.99 4	0.98 5
380	0.99 7	0.99 2
390	0.99 8	0.99 6
400	0.99 8	0.99 6
420	0.99 8	0.99 6
440	0.99 8	0.99 6
460	0.99 8	0.99 6
480	0.99 8	0.99 6
500	0.99 8	0.99 6
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 7	0.99 2
2000	0.99 1	0.97 8

Optical Glass for Precision Molding

アポロン
APORON

K-PFK85

486852	nd	1.48563	ν d	85.2	nF−nC	0.00570
K-PFK85	ne	1.48699	ν e	84.7	nF'−nC'	0.00575

屈折率 Refractive Indices

nt	1014.0	1.47924
nA'	768.2	1.48191
nr	706.5	1.48290
nC	656.3	1.48389
nC'	643.9	1.48417
nD	589.3	1.48558
nd	587.6	1.48563
ne	546.1	1.48699
nF	486.1	1.48959
nF'	480.0	1.48992
ng	435.8	1.49266
nG'	434.1	
nh	404.7	1.49519
ni	365.0	1.49945

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.00465	0.00198	0.00174	0.00310
θ C,t	θ C,A'	θ d,C	θ e,C
0.816	0.347	0.305	0.544
ng−nd	ng−nF	nh−ng	ni−ng
0.00703	0.00307	0.00253	0.00679
θ g,d	θ g,F	θ h,g	θ i,g
1.233	0.539	0.444	1.191
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00493	0.00282	0.00293	0.00953
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.857	0.490	0.510	1.657

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280	0.02 6	
290	0.08 4	
300	0.21 2	0.02 0
310	0.37 6	0.08 7
320	0.62 5	0.30 9
330	0.79 1	0.55 7
340	0.89 1	0.75 1
350	0.94 7	0.87 4
360	0.97 4	0.93 7
370	0.97 8	0.94 7
380	0.99 0	0.97 5
390	0.99 2	0.98 2
400	0.99 5	0.98 9
420	0.99 5	0.98 9
440	0.99 5	0.98 9
460	0.99 5	0.98 9
480	0.99 7	0.99 2
500	0.99 8	0.99 6
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.99 8	0.99 6

分散式の常数 Constans of Dispersion Formula

A0	2.1853008
A1	−4.7250328 ×10 $^{-3}$
A2	7.8421625 ×10 $^{-3}$
A3	8.5834419 ×10 $^{-5}$
A4	−5.3779209 ×10 $^{-7}$
A5	6.6797559 ×10 $^{-8}$

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	−0.1279
$\Delta\theta$ C,A'	−0.0303
$\Delta\theta$ g,d	0.0412
$\Delta\theta$ g,F	0.0286
$\Delta\theta$ i,g	0.1615

機械的性質 Mechanical Properties

ヌープ硬さ Hk
Knoop Hardness 338 (3)

ビッカース硬さ Hv
Vickers Hardness 327

磨耗度 Ha
Abrasion 470

ヤング率 E (10^8N/m^2)
Young's Modulus 691

剛性率 G (10^8N/m^2)
Modulus of Rigidity 264

ポアソン比 σ
Poisson Ratio 0.306

化学的性質 Chemical Properties

耐水性(粉末法) RW
Water Resistance 1

耐酸性(粉末法) RA
Acid Resistance 1

耐候性(表面法) DW
Weather Resistance 1

熱的性質 Thermal Properties

転移点 Tg (℃)
Transformation Point 452

屈伏点 At (℃)
Yielding Point 484

線膨張係数 $\alpha\times10^{-7}$
Thermal Expansion
(100-300℃) 163

備考 Remark s

その他 Other Properties

泡 B
Bubbles BB

着色度 C
Color Degree 34/29

比重 S.g
Specific Gravity 3.97

脈理 S
Striae

497815	nd 1.49700	νd 81.5	nF−nC 0.00610
K-PFK80	ne 1.49845	νe 80.9	nF'−nC' 0.00616

屈折率 Refractive Indices		
nt	1014.0	1.49007
nA'	768.2	1.49299
nr	706.5	1.49406
nC	656.3	1.49514
nC'	643.9	1.49543
nD	589.3	1.49694
nd	587.6	1.49700
ne	546.1	1.49845
nF	486.1	1.50124
nF'	480.0	1.50159
ng	435.8	1.50452
nG'	434.1	
nh	404.7	1.50722
ni	365.0	1.51178

分散式の常数 Constans of Dispersion Formula	
A0	2.2181634
A1	−5.7886349 ×10 $^{-3}$
A2	8.1751097 ×10 $^{-3}$
A3	1.6259171 ×10 $^{-4}$
A4	−1.0026576 ×10 $^{-5}$
A5	5.6977013 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	−0.0952
Δθ C,A'	−0.0209
Δθ g,d	0.0332
Δθ g,F	0.0222
Δθ i,g	0.1316

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00507	0.00215	0.00186	0.00331
θ C,t	θ C,A'	θ d,C	θ e,C
0.831	0.352	0.305	0.543
ng−nd	ng−nF	nh−ng	ni−ng
0.00752	0.00328	0.00270	0.00726
θ g,d	θ g,F	θ h,g	θ i,g
1.233	0.538	0.443	1.190
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00536	0.00302	0.00314	0.01019
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.870	0.490	0.510	1.654

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 354 (4)	転移点 Tg (℃) Transformation Point 461
ビッカース硬さ Hv Vickers Hardness 312	屈伏点 At (℃) Yielding Point 483
磨耗度 Ha Abrasion 450	線膨張係数 α ×10^{-7} Thermal Expansion (100-300℃) 154
ヤング率 E (10^{8}N/m^2) Young's Modulus 796	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 309	
ポアソン比 σ Poisson Ratio 0.287	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 34/27
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 3.60
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270	0.05 $_7$	
280	0.14 $_0$	
290	0.28 $_0$	0.04 $_1$
300	0.46 $_3$	0.14 $_6$
310	0.64 $_7$	0.33 $_7$
320	0.79 $_6$	0.56 $_6$
330	0.89 $_0$	0.74 $_8$
340	0.94 $_1$	0.86 $_1$
350	0.96 $_8$	0.92 $_3$
360	0.98 $_1$	0.95 $_4$
370	0.98 $_8$	0.97 $_1$
380	0.99 $_1$	0.97 $_8$
390	0.99 $_4$	0.98 $_5$
400	0.99 $_4$	0.98 $_5$
420	0.99 $_5$	0.98 $_9$
440	0.99 $_5$	0.98 $_9$
460	0.99 $_7$	0.99 $_2$
480	0.99 $_7$	0.99 $_2$
500	0.99 $_8$	0.99 $_6$
550	0.99 $_8$	0.99 $_6$
600	0.99 $_8$	0.99 $_6$
650	0.99 $_8$	0.99 $_6$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_8$	0.99 $_6$
2000	0.99 $_8$	0.99 $_6$

Optical Glass for Precision Molding

ガドロン
GADRON K-GFK70

569713	nd 1.56907	νd 71.3	nF−nC 0.00798
K-GFK70	ne 1.57098	νe 70.9	nF'−nC' 0.00805

屈折率 Refractive Indices		
nt	1014.0	1.56038
nA'	768.2	1.56394
nr	706.5	1.56530
nC	656.3	1.56666
nC'	643.9	1.56705
nD	589.3	1.56900
nd	587.6	1.56907
ne	546.1	1.57098
nF	486.1	1.57464
nF'	480.0	1.57510
ng	435.8	1.57899
nG'	434.1	
nh	404.7	1.58258
ni	365.0	1.58864

分散式の常数 Constans of Dispersion Formula	
A0	2.4305666
A1	−6.3501751 ×10 $^{-3}$
A2	1.0708199 ×10 $^{-2}$
A3	3.7642062 ×10 $^{-4}$
A4	−2.6059040 ×10 $^{-5}$
A5	1.1027285 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	−0.0919
Δθ C,A'	−0.0220
Δθ g,d	0.0233
Δθ g,F	0.0145
Δθ i,g	0.0719

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00628	0.00271	0.00241	0.00432
θ C,t	θ C,A'	θ d,C	θ e,C
0.787	0.340	0.302	0.541
ng−nd	ng−nF	nh−ng	ni−ng
0.00992	0.00435	0.00359	0.00965
θ g,d	θ g,F	θ h,g	θ i,g
1.243	0.545	0.450	1.209
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00667	0.00393	0.00412	0.01354
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.829	0.488	0.512	1.682

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	332 (3)	転移点 Tg (℃) Transformation Point	485
ビッカース硬さ Hv Vickers Hardness	352	屈伏点 At (℃) Yielding Point	509
磨耗度 Ha Abrasion	620	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃)	156
ヤング率 E (10^{8}N/m^2) Young's Modulus	663	備考 Remark s	
剛性率 G (10^{8}N/m^2) Modulus of Rigidity	256		
ポアソン比 σ Poisson Ratio	0.295	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	B
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	34/28
耐酸性(粉末法) RA Acid Resistance	1	比重 S.g Specific Gravity	4.41
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280	0.02 $_9$	
290	0.10 $_0$	
300	0.22 $_5$	0.02 $_4$
310	0.35 $_8$	0.07 $_7$
320	0.62 $_5$	0.30 $_9$
330	0.78 $_2$	0.54 $_1$
340	0.88 $_2$	0.73 $_0$
350	0.94 $_0$	0.85 $_7$
360	0.96 $_8$	0.92 $_3$
370	0.98 $_1$	0.95 $_4$
380	0.98 $_8$	0.97 $_1$
390	0.99 $_0$	0.97 $_5$
400	0.99 $_2$	0.98 $_2$
420	0.99 $_2$	0.98 $_2$
440	0.99 $_2$	0.98 $_2$
460	0.99 $_2$	0.98 $_2$
480	0.99 $_2$	0.98 $_2$
500	0.99 $_4$	0.98 $_5$
550	0.99 $_7$	0.99 $_2$
600	0.99 $_7$	0.99 $_2$
650	0.99 $_8$	0.99 $_6$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_8$	0.99 $_6$
2000	0.99 $_8$	0.99 $_6$

Optical Glass for Precision Molding

スーパー ガドロン
SUPER GADRON K-GFK68

592683	nd 1.59240	νd 68.3	nF−nC 0.00867
K-GFK68	ne 1.59446	νe 68.0	nF'−nC' 0.00874

屈折率 Refractive Indices		
nt	1014.0	1.58301
nA'	768.2	1.58684
nr	706.5	1.58830
nC	656.3	1.58978
nC'	643.9	1.59020
nD	589.3	1.59232
nd	587.6	1.59240
ne	546.1	1.59446
nF	486.1	1.59845
nF'	480.0	1.59894
ng	435.8	1.60318
nG'	434.1	
nh	404.7	1.60710
ni	365.0	1.61375

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00677	0.00294	0.00262	0.00468
θC,t	θC,A'	θd,C	θe,C
0.781	0.339	0.302	0.540
ng−nd	ng−nF	nh−ng	ni−ng
0.01078	0.00473	0.00392	0.01057
θg,d	θg,F	θh,g	θi,g
1.243	0.546	0.452	1.219
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00719	0.00426	0.00448	0.01481
θ'C',t	θ'e,C'	θ'F',e	θ'i,F'
0.823	0.487	0.513	1.695

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280	0.17 9	0.01 3
290	0.25 5	0.03 3
300	0.37 6	0.08 7
310	0.38 4	0.09 1
320	0.69 0	0.39 6
330	0.81 9	0.60 8
340	0.90 1	0.77 1
350	0.95 3	0.88 7
360	0.97 8	0.94 7
370	0.99 0	0.97 5
380	0.99 5	0.98 9
390	0.99 7	0.99 2
400	0.99 7	0.99 2
420	0.99 7	0.99 2
440	0.99 7	0.99 2
460	0.99 7	0.99 2
480	0.99 7	0.99 2
500	0.99 7	0.99 2
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 2	0.98 2
1500	0.98 8	0.97 1
2000	0.98 2	0.95 7

分散式の常数 Constans of Dispersion Formula	
A0	2.4998338
A1	−6.1189520 ×10 −3
A2	1.2513487 ×10 −2
A3	2.2374985 ×10 −4
A4	−5.4349382 ×10 −6
A5	2.9740284 ×10 −7

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	−0.0841
Δθ C,A'	−0.0191
Δθ g,d	0.0176
Δθ g,F	0.0105
Δθ i,g	0.0586

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 368 (4)	転移点 Tg (℃) Transformation Point 512
ビッカース硬さ Hv Vickers Hardness 390	屈伏点 At (℃) Yielding Point 536
磨耗度 Ha Abrasion 540	線膨張係数 α ×10−7 Thermal Expansion (100−300℃) 152
ヤング率 E (10^8N/m^2) Young's Modulus 683	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 261	
ポアソン比 σ Poisson Ratio 0.308	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 34/28
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 4.51
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

487704 Schott Type	nd 1.48749	ν d 70.4	nF-nC 0.00692
K-FK5	ne 1.48914	ν e 70.2	nF'-nC' 0.00697

屈折率 Refractive Indices		
nt	1014.0	1.47913
nA'	768.2	1.48282
nr	706.5	1.48410
nC	656.3	1.48535
nC'	643.9	1.48569
nD	589.3	1.48743
nd	587.6	1.48749
ne	546.1	1.48914
nF	486.1	1.49227
nF'	480.0	1.49266
ng	435.8	1.49593
nG'	434.1	
nh	404.7	1.49894
ni	365.0	1.50401

分散式の常数 Constans of Dispersion Formula	
A0	2.1889681
A1	$-9.6467030 \times 10^{-3}$
A2	8.8503901×10^{-3}
A3	1.8716795×10^{-4}
A4	$-1.0785912 \times 10^{-5}$
A5	6.1564212×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0240
$\Delta\theta$ C,A'	0.0050
$\Delta\theta$ g,d	−0.0019
$\Delta\theta$ g,F	−0.0030
$\Delta\theta$ i,g	0.0235

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.00622	0.00253	0.00214	0.00379
θ C,t	θ C,A'	θ d,C	θ e,C
0.899	0.366	0.309	0.548
ng-nd	ng-nF	nh-ng	ni-ng
0.00844	0.00366	0.00301	0.00808
θ g,d	θ g,F	θ h,g	θ i,g
1.220	0.529	0.435	1.168
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.00656	0.00345	0.00352	0.01135
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.941	0.495	0.505	1.628

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 531 (5)	転移点 Tg (℃) Transformation Point 465
ビッカース硬さ Hv Vickers Hardness 582	屈伏点 At (℃) Yielding Point 545
磨耗度 Ha Abrasion 110	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 98
ヤング率 E (10^8N/m^2) Young's Modulus 605	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 244	
ポアソン比 σ Poisson Ratio 0.241	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 4	着色度 C Color Degree 29/26
耐酸性(粉末法) RA Acid Resistance 5	比重 S.g Specific Gravity 2.45
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270	0.32 4	0.06 0
280	0.62 5	0.30 9
290	0.83 3	0.63 3
300	0.92 9	0.83 2
310	0.96 8	0.92 3
320	0.97 7	0.94 4
330	0.98 2	0.95 7
340	0.98 5	0.96 4
350	0.98 8	0.97 1
360	0.99 0	0.97 5
370	0.99 0	0.97 5
380	0.99 0	0.97 5
390	0.99 0	0.97 5
400	0.99 0	0.97 5
420	0.99 1	0.97 8
440	0.99 1	0.97 8
460	0.99 1	0.97 8
480	0.99 1	0.97 8
500	0.99 1	0.97 8
550	0.99 4	0.98 5
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.97 8	0.94 7
2000	0.96 8	0.92 3

569631 Schott Type K-PSK2	nd 1.56873	νd 63.1	nF-nC 0.00901
	ne 1.57088	νe 62.9	nF'-nC' 0.00907

屈折率 Refractive Indices		
nt	1014.0	1.55824
nA'	768.2	1.56276
nr	706.5	1.56438
nC	656.3	1.56597
nC'	643.9	1.56641
nD	589.3	1.56865
nd	587.6	1.56873
ne	546.1	1.57088
nF	486.1	1.57498
nF'	480.0	1.57548
ng	435.8	1.57981
nG'	434.1	
nh	404.7	1.58381
ni	365.0	1.59060

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.00773	0.00321	0.00276	0.00491
θC,t	θC,A'	θd,C	θe,C
0.858	0.356	0.306	0.545
ng-nd	ng-nF	nh-ng	ni-ng
0.01108	0.00483	0.00400	0.01079
θg,d	θg,F	θh,g	θi,g
1.230	0.536	0.444	1.198
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.00817	0.00447	0.00460	0.01512
θ'C',t	θ'e,C'	θ'F',e	θ'i,F'
0.901	0.493	0.507	1.667

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270	0.29 9	0.04 9
280	0.49 9	0.17 6
290	0.66 9	0.36 6
300	0.79 9	0.57 1
310	0.87 6	0.71 9
320	0.92 9	0.83 2
330	0.95 7	0.89 6
340	0.97 5	0.94 0
350	0.98 5	0.96 4
360	0.98 8	0.97 1
370	0.99 5	0.98 9
380	0.99 5	0.98 9
390	0.99 7	0.99 2
400	0.99 7	0.99 2
420	0.99 7	0.99 2
440	0.99 7	0.99 2
460	0.99 7	0.99 2
480	0.99 7	0.99 2
500	0.99 8	0.99 6
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 1	0.93 0

分散式の常数 Constans of Dispersion Formula	
A0	2.4271445
A1	−1.0938097 ×10 −2
A2	1.2336307 ×10 −2
A3	2.3445925 ×10 −4
A4	−7.9527192 ×10 −6
A5	5.9437136 ×10 −7

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0173
Δθ C,A'	0.0041
Δθ g,d	−0.0064
Δθ g,F	−0.0068
Δθ i,g	−0.0033

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 554 (6)	転移点 Tg (℃) Transformation Point 615
ビッカース硬さ Hv Vickers Hardness 566	屈伏点 At (℃) Yielding Point 653
磨耗度 Ha Abrasion 110	線膨張係数 α ×10^{-7} Thermal Expansion (100-300℃) 75
ヤング率 E (10^{8}N/m^2) Young's Modulus 859	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 347	
ポアソン比 σ Poisson Ratio 0.239	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 3	着色度 C Color Degree 33/27
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.06
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

618634 Schott Type	nd 1.61800	ν d 63.4	nF−nC 0.00975
K-PSKn2	ne 1.62033	ν e 63.0	nF'−nC' 0.00984

屈折率 Refractive Indices		
nt	1014.0	1.60691
nA'	768.2	1.61163
nr	706.5	1.61334
nC	656.3	1.61503
nC'	643.9	1.61550
nD	589.3	1.61791
nd	587.6	1.61800
ne	546.1	1.62033
nF	486.1	1.62478
nF'	480.0	1.62534
ng	435.8	1.63007
nG'	434.1	
nh	404.7	1.63444
ni	365.0	1.64186

分散式の常数 Constans of Dispersion Formula	
A0	2.5811516
A1	$-1.1534491 \times 10^{-2}$
A2	1.2703918×10^{-2}
A3	5.8195394×10^{-4}
A4	$-4.4244275 \times 10^{-5}$
A5	2.1000343×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0091
$\Delta\theta$ C,A'	−0.0037
$\Delta\theta$ g,d	0.0023
$\Delta\theta$ g,F	0.0001
$\Delta\theta$ i,g	0.0104

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00812	0.00340	0.00297	0.00530
θ C,t	θ C,A'	θ d,C	θ e,C
0.833	0.349	0.305	0.544
ng−nd	ng−nF	nh−ng	ni−ng
0.01207	0.00529	0.00437	0.01179
θ g,d	θ g,F	θ h,g	θ i,g
1.238	0.543	0.448	1.209
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00859	0.00483	0.00501	0.01652
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.873	0.491	0.509	1.679

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 407 (4)	転移点 Tg (℃) Transformation Point 624
ビッカース硬さ Hv Vickers Hardness 429	屈伏点 At (℃) Yielding Point 655
磨耗度 Ha Abrasion 270	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 99
ヤング率 E (10^8N/m^2) Young's Modulus 769	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 298	
ポアソン比 σ Poisson Ratio 0.289	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 38/32
耐酸性(粉末法) RA Acid Resistance 5	比重 S.g Specific Gravity 3.63
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.02 7	
320	0.10 0	0.00 3
330	0.23 2	0.02 6
340	0.43 1	0.12 2
350	0.61 9	0.30 1
360	0.77 2	0.52 5
370	0.86 9	0.70 5
380	0.92 3	0.82 0
390	0.95 7	0.89 6
400	0.97 1	0.93 0
420	0.98 5	0.96 4
440	0.98 8	0.97 1
460	0.99 0	0.97 5
480	0.99 0	0.97 5
500	0.99 1	0.97 8
550	0.99 4	0.98 5
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.98 2	0.95 7

510634 Schott Type BK1	nd 1.51009	ν d 63.4	nF−nC 0.00805
	ne 1.51201	ν e 63.1	nF'−nC' 0.00811

屈折率 Refractive Indices		
nt	1014.0	1.50074
nA'	768.2	1.50476
nr	706.5	1.50620
nC	656.3	1.50762
nC'	643.9	1.50802
nD	589.3	1.51002
nd	587.6	1.51009
ne	546.1	1.51201
nF	486.1	1.51567
nF'	480.0	1.51613
ng	435.8	1.52000
nG'	434.1	
nh	404.7	1.52357
ni	365.0	1.52963

分散式の常数 Constans of Dispersion Formula	
A0	2.2508689
A1	−9.0765100 ×10 $^{-3}$
A2	1.0845626 ×10 $^{-2}$
A3	1.4118936 ×10 $^{-4}$
A4	1.3318603 ×10 $^{-6}$
A5	5.9688505 ×10 $^{-8}$

異常分散性 Deviation of Relative Partial Dispersions	
Δ θ C,t	0.0128
Δ θ C,A'	0.0028
Δ θ g,d	−0.0046
Δ θ g,F	−0.0046
Δ θ i,g	−0.0027

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00688	0.00286	0.00247	0.00439
θ C,t	θ C,A'	θ d,C	θ e,C
0.855	0.355	0.307	0.545
ng−nd	ng−nF	nh−ng	ni−ng
0.00991	0.00433	0.00357	0.00963
θ g,d	θ g,F	θ h,g	θ i,g
1.231	0.538	0.443	1.196
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00728	0.00399	0.00412	0.01350
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.898	0.492	0.508	1.665

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 518 (5)	転移点 Tg (℃) Transformation Point 546
ビッカース硬さ Hv Vickers Hardness 508	屈伏点 At (℃) Yielding Point 619
磨耗度 Ha Abrasion 110	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 91
ヤング率 E (10^{8}N/m^2) Young's Modulus 737	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 304	Pbless
ポアソン比 σ Poisson Ratio 0.212	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 2	着色度 C Color Degree 34/29
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 2.47
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290	0.03 $_2$	
300	0.19 $_2$	0.01 $_6$
310	0.47 $_0$	0.15 $_1$
320	0.70 $_8$	0.42 $_3$
330	0.78 $_2$	0.54 $_1$
340	0.92 $_5$	0.82 $_3$
350	0.96 $_3$	0.91 $_0$
360	0.97 $_8$	0.94 $_7$
370	0.98 $_5$	0.96 $_4$
380	0.98 $_5$	0.96 $_4$
390	0.99 $_5$	0.98 $_9$
400	0.99 $_5$	0.98 $_9$
420	0.99 $_5$	0.98 $_9$
440	0.99 $_4$	0.98 $_5$
460	0.99 $_5$	0.98 $_9$
480	0.99 $_5$	0.98 $_9$
500	0.99 $_7$	0.99 $_2$
550	0.99 $_7$	0.99 $_2$
600	0.99 $_7$	0.99 $_2$
650	0.99 $_7$	0.99 $_2$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_7$	0.99 $_2$
1500	0.99 $_4$	0.98 $_5$
2000	0.90 $_4$	0.77 $_7$

498651 Schott Type BK3	nd 1.49831	ν d 65.1	nF−nC 0.00765
	ne 1.50014	ν e 65.0	nF'−nC' 0.00769

屈折率 Refractive Indices		
nt	1014.0	1.48914
nA'	768.2	1.49317
nr	706.5	1.49457
nC	656.3	1.49595
nC'	643.9	1.49633
nD	589.3	1.49824
nd	587.6	1.49831
ne	546.1	1.50014
nF	486.1	1.50360
nF'	480.0	1.50402
ng	435.8	1.50766
nG'	434.1	
nh	404.7	1.51099
ni	365.0	1.51664

分散式の常数 Constans of Dispersion Formula	
A0	2.2178038
A1	$-1.0047625 \times 10^{-2}$
A2	1.0237891×10^{-2}
A3	1.1330490×10^{-4}
A4	$-7.3326462 \times 10^{-7}$
A5	2.5769068×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0401
$\Delta\theta$ C,A'	0.0089
$\Delta\theta$ g,d	−0.0099
$\Delta\theta$ g,F	−0.0091
$\Delta\theta$ i,g	−0.0114

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00681	0.00278	0.00236	0.00419
θ C,t	θ C,A'	θ d,C	θ e,C
0.890	0.363	0.308	0.548
ng−nd	ng−nF	nh−ng	ni−ng
0.00935	0.00406	0.00333	0.00898
θ g,d	θ g,F	θ h,g	θ i,g
1.222	0.531	0.435	1.174
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00719	0.00381	0.00388	0.01262
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.935	0.495	0.505	1.641

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 484 (5)	転移点 Tg (℃) Transformation Point 540
ビッカース硬さ Hv Vickers Hardness 503	屈伏点 At (℃) Yielding Point 611
磨耗度 Ha Abrasion 100	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 65
ヤング率 E (10^8N/m^2) Young's Modulus 632	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 259	Pbless
ポアソン比 σ Poisson Ratio 0.220	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 3	着色度 C Color Degree 33/28
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 2.36
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280	0.03 7	
290	0.23 2	0.02 6
300	0.51 6	0.19 2
310	0.74 0	0.47 1
320	0.86 8	0.70 2
330	0.92 9	0.83 2
340	0.96 4	0.91 3
350	0.97 8	0.94 7
360	0.98 5	0.96 4
370	0.98 5	0.96 4
380	0.98 5	0.96 4
390	0.99 4	0.98 5
400	0.99 2	0.98 2
420	0.99 4	0.98 5
440	0.99 4	0.98 5
460	0.99 4	0.98 5
480	0.99 5	0.98 9
500	0.99 7	0.99 2
550	0.99 7	0.99 2
600	0.99 7	0.99 2
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.98 5	0.96 4
2000	0.94 7	0.87 4

516641 Schott Type K-BK7	nd 1.51633	νd 64.1	nF-nC 0.00806
	ne 1.51825	νe 63.8	nF'-nC' 0.00812

屈折率 Refractive Indices		
nt	1014.0	1.50686
nA'	768.2	1.51097
nr	706.5	1.51242
nC	656.3	1.51385
nC'	643.9	1.51425
nD	589.3	1.51626
nd	587.6	1.51633
ne	546.1	1.51825
nF	486.1	1.52191
nF'	480.0	1.52237
ng	435.8	1.52622
nG'	434.1	
nh	404.7	1.52978
ni	365.0	1.53584

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.00699	0.00288	0.00248	0.00440
θ C,t	θ C,A'	θ d,C	θ e,C
0.867	0.357	0.308	0.546
ng-nd	ng-nF	nh-ng	ni-ng
0.00989	0.00431	0.00356	0.00962
θ g,d	θ g,F	θ h,g	θ i,g
1.227	0.535	0.442	1.194
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.00739	0.00400	0.00412	0.01347
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.910	0.493	0.507	1.659

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290	0.02 4	
300	0.15 8	
310	0.41 4	0.11 0
320	0.65 0	0.34 1
330	0.80 6	0.58 3
340	0.89 4	0.75 6
350	0.94 0	0.85 7
360	0.96 4	0.91 3
370	0.97 1	0.93 0
380	0.97 4	0.93 7
390	0.98 2	0.95 7
400	0.98 8	0.97 1
420	0.98 8	0.97 1
440	0.98 8	0.97 1
460	0.99 0	0.97 5
480	0.99 0	0.97 5
500	0.99 2	0.98 2
550	0.99 5	0.98 9
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 1	0.97 8
2000	0.92 9	0.83 2

分散式の常数 Constans of Dispersion Formula	
A0	2.2704549
A1	$-9.9748327 \times 10^{-3}$
A2	1.0468377×10^{-2}
A3	2.7974250×10^{-4}
A4	$-2.1706023 \times 10^{-5}$
A5	1.4265697×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0222
Δθ C,A'	0.0041
Δθ g,d	-0.0073
Δθ g,F	-0.0067
Δθ i,g	-0.0001

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 589 (6)	転移点 Tg (℃) Transformation Point 553
ビッカース硬さ Hv Vickers Hardness 587	屈伏点 At (℃) Yielding Point 614
磨耗度 Ha Abrasion 100	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 90
ヤング率 E (10^8N/m^2) Young's Modulus 799	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 330	
ポアソン比 σ Poisson Ratio 0.209	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 2	着色度 C Color Degree 34/29
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 2.52
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

518603 Schott Type	nd 1.51835	ν d 60.3	nF−nC 0.00859
BaLK3	ne 1.52040	ν e 60.1	nF'−nC' 0.00866

屈折率 Refractive Indices		
nt	1014.0	1.50866
nA'	768.2	1.51272
nr	706.5	1.51423
nC	656.3	1.51573
nC'	643.9	1.51615
nD	589.3	1.51827
nd	587.6	1.51835
ne	546.1	1.52040
nF	486.1	1.52432
nF'	480.0	1.52481
ng	435.8	1.52897
nG'	434.1	
nh	404.7	1.53283
ni	365.0	1.53942

分散式の常数 Constans of Dispersion Formula	
A0	2.2714447
A1	−7.3550007 ×10 $^{-3}$
A2	1.2528285 ×10 $^{-2}$
A3	−3.4275291 ×10 $^{-5}$
A4	2.1642578 ×10 $^{-5}$
A5	−5.9928023 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
Δ θ C,t	−0.0047
Δ θ C,A'	0.0015
Δ θ g,d	−0.0054
Δ θ g,F	−0.0056
Δ θ i,g	−0.0059

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00707	0.00301	0.00262	0.00467
θ C,t	θ C,A'	θ d,C	θ e,C
0.823	0.350	0.305	0.544
ng−nd	ng−nF	nh−ng	ni−ng
0.01062	0.00465	0.00386	0.01045
θ g,d	θ g,F	θ h,g	θ i,g
1.236	0.541	0.449	1.217
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00749	0.00425	0.00441	0.01461
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.865	0.491	0.509	1.687

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 459 (5)	転移点 Tg (℃) Transformation Point 497
ビッカース硬さ Hv Vickers Hardness 459	屈伏点 At (℃) Yielding Point 567
磨耗度 Ha Abrasion 120	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 110
ヤング率 E (10^{8}N/m^2) Young's Modulus 655	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 267	
ポアソン比 σ Poisson Ratio 0.228	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 2	着色度 C Color Degree 34/29
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 2.61
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290	0.02 $_5$	
300	0.10 $_7$	
310	0.46 $_4$	0.14 $_7$
320	0.69 $_4$	0.40 $_2$
330	0.83 $_9$	0.64 $_6$
340	0.92 $_0$	0.81 $_3$
350	0.95 $_7$	0.89 $_6$
360	0.97 $_8$	0.94 $_7$
370	0.98 $_2$	0.95 $_7$
380	0.98 $_5$	0.96 $_4$
390	0.99 $_4$	0.98 $_5$
400	0.99 $_5$	0.98 $_9$
420	0.99 $_7$	0.99 $_2$
440	0.99 $_7$	0.99 $_2$
460	0.99 $_7$	0.99 $_2$
480	0.99 $_7$	0.99 $_2$
500	0.99 $_7$	0.99 $_2$
550	0.99 $_8$	0.99 $_6$
600	0.99 $_8$	0.99 $_6$
650	0.99 $_8$	0.99 $_6$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_5$	0.98 $_9$
1500	0.99 $_2$	0.98 $_2$
2000	0.90 $_1$	0.77 $_1$

518590 Schott Type	nd 1.51823	ν d 59.0	nF−nC 0.00879
K3	ne 1.52034	ν e 58.7	nF'−nC' 0.00887

屈折率 Refractive Indices		
nt	1014.0	1.50836
nA'	768.2	1.51250
nr	706.5	1.51403
nC	656.3	1.51556
nC'	643.9	1.51600
nD	589.3	1.51816
nd	587.6	1.51823
ne	546.1	1.52034
nF	486.1	1.52435
nF'	480.0	1.52487
ng	435.8	1.52915
nG'	434.1	
nh	404.7	1.53315
ni	365.0	1.53997

分散式の常数 Constans of Dispersion Formula	
A0	2.2697041
A1	$-7.1334908 \times 10^{-3}$
A2	1.3314295×10^{-2}
A3	$-2.3181828 \times 10^{-4}$
A4	5.6167533×10^{-5}
A5	$-2.4785272 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0021
$\Delta\theta$ C,A'	0.0008
$\Delta\theta$ g,d	−0.0022
$\Delta\theta$ g,F	−0.0030
$\Delta\theta$ i,g	−0.0022

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00720	0.00306	0.00267	0.00478
θ C,t	θ C,A'	θ d,C	θ e,C
0.819	0.348	0.304	0.544
ng−nd	ng−nF	nh−ng	ni−ng
0.01092	0.00480	0.00400	0.01082
θ g,d	θ g,F	θ h,g	θ i,g
1.242	0.546	0.455	1.231
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00764	0.00434	0.00453	0.01510
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.861	0.489	0.511	1.702

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 549 (5)	転移点 Tg (℃) Transformation Point 512
ビッカース硬さ Hv Vickers Hardness 543	屈伏点 At (℃) Yielding Point 565
磨耗度 Ha Abrasion 120	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 106
ヤング率 E (10^8N/m^2) Young's Modulus 700	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 286	
ポアソン比 σ Poisson Ratio 0.223	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 2	着色度 C Color Degree 33/30
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 2.54
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300	0.01 7	
310	0.24 1	0.02 8
320	0.57 0	0.24 5
330	0.79 2	0.55 9
340	0.90 8	0.78 6
350	0.95 7	0.89 6
360	0.98 0	0.95 0
370	0.98 2	0.95 7
380	0.98 5	0.96 4
390	0.99 1	0.97 8
400	0.99 4	0.98 5
420	0.99 2	0.98 2
440	0.99 2	0.98 2
460	0.99 5	0.98 9
480	0.99 5	0.98 9
500	0.99 5	0.98 9
550	0.99 7	0.99 2
600	0.99 7	0.99 2
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.91 2	0.79 5

522596 Schott Type	nd 1.52249	ν d 59.6	nF−nC 0.00876
K5	ne 1.52458	ν e 59.4	nF'−nC' 0.00883

屈折率 Refractive Indices		
nt	1014.0	1.51259
nA'	768.2	1.51677
nr	706.5	1.51830
nC	656.3	1.51982
nC'	643.9	1.52025
nD	589.3	1.52241
nd	587.6	1.52249
ne	546.1	1.52458
nF	486.1	1.52858
nF'	480.0	1.52908
ng	435.8	1.53335
nG'	434.1	
nh	404.7	1.53731
ni	365.0	1.54408

分散式の常数 Constans of Dispersion Formula	
A0	2.2843076
A1	$-8.2009989 \times 10^{-3}$
A2	1.2334967×10^{-2}
A3	3.9915279×10^{-5}
A4	2.0073945×10^{-5}
A5	$-7.3997900 \times 10^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0009
$\Delta\theta$ C,A'	
$\Delta\theta$ g,d	−0.0034
$\Delta\theta$ g,F	−0.0035
$\Delta\theta$ i,g	−0.0030

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00723	0.00305	0.00267	0.00476
θ C,t	θ C,A'	θ d,C	θ e,C
0.825	0.348	0.305	0.543
ng−nd	ng−nF	nh−ng	ni−ng
0.01086	0.00477	0.00396	0.01073
θ g,d	θ g,F	θ h,g	θ i,g
1.240	0.545	0.452	1.225
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00766	0.00433	0.00450	0.01500
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.867	0.490	0.510	1.699

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 497 (5)	転移点 Tg (℃) Transformation Point 542
ビッカース硬さ Hv Vickers Hardness 493	屈伏点 At (℃) Yielding Point 605
磨耗度 Ha Abrasion 110	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 98
ヤング率 E (10^8N/m^2) Young's Modulus 711	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 291	
ポアソン比 σ Poisson Ratio 0.222	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 2	着色度 C Color Degree 34/30
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 2.60
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300	0.10 0	0.00 3
310	0.35 0	0.07 2
320	0.58 8	0.26 5
330	0.76 6	0.51 4
340	0.87 6	0.71 9
350	0.92 9	0.83 2
360	0.95 7	0.89 6
370	0.97 1	0.93 0
380	0.97 4	0.93 7
390	0.98 2	0.95 7
400	0.98 8	0.97 1
420	0.98 8	0.97 1
440	0.99 0	0.97 5
460	0.99 0	0.97 5
480	0.99 4	0.98 5
500	0.99 4	0.98 5
550	0.99 5	0.98 9
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 0	0.97 5
1500	0.98 2	0.95 7
2000	0.92 5	0.82 3

511605 Schott Type K7	nd	1.51112	ν d	60.5	nF−nC	0.00845
	ne	1.51314	ν e	60.2	nF'−nC'	0.00852

屈折率 Refractive Indices		
nt	1014.0	1.50154
nA'	768.2	1.50559
nr	706.5	1.50707
nC	656.3	1.50854
nC'	643.9	1.50896
nD	589.3	1.51104
nd	587.6	1.51112
ne	546.1	1.51314
nF	486.1	1.51699
nF'	480.0	1.51748
ng	435.8	1.52161
nG'	434.1	
nh	404.7	1.52542
ni	365.0	1.53193

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00700	0.00295	0.00258	0.00460
θ C,t	θ C,A'	θ d,C	θ e,C
0.828	0.349	0.305	0.544
ng−nd	ng−nF	nh−ng	ni−ng
0.01049	0.00462	0.00381	0.01032
θ g,d	θ g,F	θ h,g	θ i,g
1.241	0.547	0.451	1.221
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00742	0.00418	0.00434	0.01445
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.871	0.491	0.509	1.696

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300	0.07_{2}	
310	0.36_{0}	0.07_{8}
320	0.65_{0}	0.34_{1}
330	0.83_{3}	0.63_{3}
340	0.91_{5}	0.80_{1}
350	0.95_{4}	0.89_{0}
360	0.97_{4}	0.93_{7}
370	0.98_{0}	0.95_{0}
380	0.97_{8}	0.94_{7}
390	0.98_{5}	0.96_{4}
400	0.99_{0}	0.97_{5}
420	0.99_{0}	0.97_{5}
440	0.99_{0}	0.97_{5}
460	0.99_{0}	0.97_{5}
480	0.99_{2}	0.98_{2}
500	0.99_{2}	0.98_{2}
550	0.99_{5}	0.99_{0}
600	0.99_{7}	0.99_{2}
650	0.99_{7}	0.99_{2}
700	0.99_{8}	0.99_{6}
800	0.99_{8}	0.99_{6}
1060	0.99_{7}	0.99_{2}
1500	0.99_{2}	0.98_{2}
2000	0.93_{3}	0.84_{4}

分散式の常数 Constans of Dispersion Formula	
A0	2.2509295
A1	$-7.8312663 \times 10^{-3}$
A2	1.2111011×10^{-2}
A3	$-7.1712558 \times 10^{-5}$
A4	3.7220148×10^{-5}
A5	$-1.7882575 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	
$\Delta\theta$ C,A'	
$\Delta\theta$ g,d	
$\Delta\theta$ g,F	
$\Delta\theta$ i,g	

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	485 (5)	転移点 Tg (℃) Transformation Point	534
ビッカース硬さ Hv Vickers Hardness	519	屈伏点 At (℃) Yielding Point	611
磨耗度 Ha Abrasion	110	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	91
ヤング率 E (10^8N/m^2) Young's Modulus	701	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	288		
ポアソン比 σ Poisson Ratio	0.215	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	33/30
耐酸性(粉末法) RA Acid Resistance	1	比重 S.g Specific Gravity	2.50
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

573575 Schott Type	nd 1.57250	ν d 57.5	nF−nC 0.00996
BaK1	ne 1.57487	ν e 57.2	nF'−nC' 0.01005

屈折率 Refractive Indices		
nt	1014.0	1.56146
nA'	768.2	1.56606
nr	706.5	1.56777
nC	656.3	1.56948
nC'	643.9	1.56996
nD	589.3	1.57241
nd	587.6	1.57250
ne	546.1	1.57487
nF	486.1	1.57944
nF'	480.0	1.58001
ng	435.8	1.58489
nG'	434.1	
nh	404.7	1.58943
ni	365.0	1.59720

分散式の常数 Constans of Dispersion Formula	
A0	2.4335798
A1	$-8.8716928 \times 10^{-3}$
A2	1.3827884×10^{-2}
A3	2.6757559×10^{-4}
A4	$-4.1176327 \times 10^{-6}$
A5	4.8297313×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0091
$\Delta\theta$ C,A'	−0.0023
$\Delta\theta$ g,d	−0.0034
$\Delta\theta$ g,F	−0.0040
$\Delta\theta$ i,g	−0.0087

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00802	0.00342	0.00302	0.00539
θ C,t	θ C,A'	θ d,C	θ e,C
0.805	0.343	0.303	0.541
ng−nd	ng−nF	nh−ng	ni−ng
0.01239	0.00545	0.00454	0.01231
θ g,d	θ g,F	θ h,g	θ i,g
1.244	0.547	0.456	1.236
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00850	0.00491	0.00514	0.01719
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.846	0.489	0.511	1.710

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 561 (6)	転移点 Tg (℃) Transformation Point 573
ビッカース硬さ Hv Vickers Hardness 560	屈伏点 At (℃) Yielding Point 619
磨耗度 Ha Abrasion 140	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 89
ヤング率 E (10^8N/m^2) Young's Modulus 759	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 304	
ポアソン比 σ Poisson Ratio 0.249	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 36/31
耐酸性(粉末法) RA Acid Resistance 2	比重 S.g Specific Gravity 3.18
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290	0.02 7	
300	0.17 0	0.01 2
310	0.40 3	0.10 3
320	0.64 4	0.33 3
330	0.80 6	0.58 3
340	0.90 5	0.78 0
350	0.95 4	0.89 0
360	0.97 1	0.93 0
370	0.98 2	0.95 7
380	0.99 5	0.98 9
390	0.99 7	0.99 2
400	0.99 7	0.99 2
420	0.99 7	0.99 2
440	0.99 7	0.99 2
460	0.99 8	0.99 6
480	0.99 8	0.99 6
500	0.99 8	0.99 6
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 5	0.98 9
1500	0.98 5	0.96 4
2000	0.94 7	0.87 4

540597 Schott Type	nd	1.53996	ν d	59.7	nF−nC 0.00905
BaK2	ne	1.54212	ν e	59.4	nF'−nC' 0.00912

屈折率 Refractive Indices

nt	1014.0	1.52979
nA'	768.2	1.53406
nr	706.5	1.53564
nC	656.3	1.53721
nC'	643.9	1.53765
nD	589.3	1.53988
nd	587.6	1.53996
ne	546.1	1.54212
nF	486.1	1.54626
nF'	480.0	1.54677
ng	435.8	1.55118
nG'	434.1	
nh	404.7	1.55527
ni	365.0	1.56224

分散式の常数 Constans of Dispersion Formula

A0	2.3362609
A1	−8.3060435 ×10 $^{-3}$
A2	1.2795944 ×10 $^{-2}$
A3	8.1144143 ×10 $^{-5}$
A4	1.5937406 ×10 $^{-5}$
A5	−6.0181372 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions

Δ θ C,t	−0.0047
Δ θ C,A'	−0.0001
Δ θ g,d	−0.0033
Δ θ g,F	−0.0043
Δ θ i,g	−0.0056

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.00742	0.00315	0.00275	0.00491
θ C,t	θ C,A'	θ d,C	θ e,C
0.820	0.348	0.304	0.543
ng−nd	ng−nF	nh−ng	ni−ng
0.01122	0.00492	0.00409	0.01106
θ g,d	θ g,F	θ h,g	θ i,g
1.240	0.544	0.452	1.222
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00786	0.00447	0.00465	0.01547
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.862	0.490	0.510	1.696

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	501 (5)	転移点 Tg (℃) Transformation Point	556
ビッカース硬さ Hv Vickers Hardness	508	屈伏点 At (℃) Yielding Point	618
磨耗度 Ha Abrasion	120	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃)	92
ヤング率 E (10^{8}N/m^2) Young's Modulus	703	備考 Remark s	
剛性率 G (10^{8}N/m^2) Modulus of Rigidity	285	Pbless	
ポアソン比 σ Poisson Ratio	0.232	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	34/30
耐酸性(粉末法) RA Acid Resistance	1	比重 S.g Specific Gravity	2.86
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290	0.04 $_2$	
300	0.25 $_1$	0.03 $_1$
310	0.44 $_7$	0.13 $_4$
320	0.67 $_5$	0.37 $_5$
330	0.82 $_3$	0.61 $_5$
340	0.90 $_1$	0.77 $_1$
350	0.94 $_3$	0.86 $_4$
360	0.96 $_4$	0.91 $_3$
370	0.97 $_4$	0.93 $_7$
380	0.97 $_5$	0.94 $_0$
390	0.98 $_2$	0.95 $_7$
400	0.98 $_5$	0.96 $_4$
420	0.98 $_5$	0.96 $_4$
440	0.98 $_5$	0.96 $_4$
460	0.98 $_8$	0.97 $_1$
480	0.98 $_8$	0.97 $_1$
500	0.99 $_0$	0.97 $_5$
550	0.99 $_4$	0.98 $_5$
600	0.99 $_5$	0.98 $_9$
650	0.99 $_5$	0.98 $_9$
700	0.99 $_7$	0.99 $_2$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_7$	0.99 $_2$
2000	0.94 $_3$	0.86 $_4$

569560 Schott Type	nd 1.56883	ν d 56.0	nF−nC 0.01015
BaK4	ne 1.57125	ν e 55.8	nF'−nC' 0.01024

屈折率 Refractive Indices

nt	1014.0	1.55758
nA'	768.2	1.56227
nr	706.5	1.56402
nC	656.3	1.56576
nC'	643.9	1.56625
nD	589.3	1.56874
nd	587.6	1.56883
ne	546.1	1.57125
nF	486.1	1.57591
nF'	480.0	1.57649
ng	435.8	1.58147
nG'	434.1	
nh	404.7	1.58612
ni	365.0	1.59409

分散式の常数 Constans of Dispersion Formula

A0	2.4220110
A1	−9.3683029 ×10 $^{-3}$
A2	1.3736364 ×10 $^{-2}$
A3	3.4541550 ×10 $^{-4}$
A4	−1.2125860 ×10 $^{-5}$
A5	9.2369920 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions

Δ θ C,t	−0.0017
Δ θ C,A'	−0.0001
Δ θ g,d	−0.0050
Δ θ g,F	−0.0056
Δ θ i,g	−0.0124

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.00818	0.00349	0.00307	0.00549
θ C,t	θ C,A'	θ d,C	θ e,C
0.806	0.344	0.302	0.541
ng−nd	ng−nF	nh−ng	ni−ng
0.01264	0.00556	0.00465	0.01262
θ g,d	θ g,F	θ h,g	θ i,g
1.245	0.548	0.458	1.243
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00867	0.00500	0.00524	0.01760
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.847	0.488	0.512	1.719

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 488 (5)	転移点 Tg (℃) Transformation Point 559
ビッカース硬さ Hv Vickers Hardness 464	屈伏点 At (℃) Yielding Point 611
磨耗度 Ha Abrasion 130	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 85
ヤング率 E (10^8N/m^2) Young's Modulus 759	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 305	
ポアソン比 σ Poisson Ratio 0.243	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 35/31
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.11
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310	0.05 $_1$	
320	0.27 $_0$	0.03 $_7$
330	0.54 $_6$	0.22 $_0$
340	0.74 $_7$	0.48 $_3$
350	0.86 $_7$	0.70 $_0$
360	0.93 $_2$	0.83 $_8$
370	0.96 $_4$	0.91 $_3$
380	0.97 $_5$	0.94 $_0$
390	0.98 $_2$	0.95 $_7$
400	0.99 $_4$	0.98 $_5$
420	0.99 $_5$	0.98 $_9$
440	0.99 $_5$	0.98 $_9$
460	0.99 $_7$	0.99 $_2$
480	0.99 $_7$	0.99 $_2$
500	0.99 $_7$	0.99 $_2$
550	0.99 $_7$	0.99 $_2$
600	0.99 $_7$	0.99 $_2$
650	0.99 $_8$	0.99 $_6$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_0$	0.97 $_5$
1500	0.97 $_8$	0.94 $_7$
2000	0.94 $_3$	0.86 $_4$

610565 Schott Type	nd 1.61025	ν d 56.5	nF−nC 0.01080
SK1	ne 1.61282	ν e 56.2	nF'−nC' 0.01090

屈折率 Refractive Indices		
nt	1014.0	1.59834
nA'	768.2	1.60328
nr	706.5	1.60513
nC	656.3	1.60698
nC'	643.9	1.60750
nD	589.3	1.61015
nd	587.6	1.61025
ne	546.1	1.61282
nF	486.1	1.61778
nF'	480.0	1.61840
ng	435.8	1.62370
nG'	434.1	
nh	404.7	1.62863
ni	365.0	1.63709

分散式の常数 Constans of Dispersion Formula	
A0	2.5497575
A1	$-9.7374305 \times 10^{-3}$
A2	1.4968468×10^{-2}
A3	4.2940752×10^{-4}
A4	$-2.3353517 \times 10^{-5}$
A5	1.5572796×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0098
$\Delta\theta$ C,A'	−0.0019
$\Delta\theta$ g,d	−0.0040
$\Delta\theta$ g,F	−0.0045
$\Delta\theta$ i,g	−0.0124

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00864	0.00370	0.00327	0.00584
θ C,t	θ C,A'	θ d,C	θ e,C
0.800	0.343	0.303	0.541
ng−nd	ng−nF	nh−ng	ni−ng
0.01345	0.00592	0.00493	0.01339
θ g,d	θ g,F	θ h,g	θ i,g
1.245	0.548	0.456	1.240
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00916	0.00532	0.00558	0.01869
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.840	0.488	0.512	1.715

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 476 (5)	転移点 Tg (℃) Transformation Point 654
ビッカース硬さ Hv Vickers Hardness 479	屈伏点 At (℃) Yielding Point 695
磨耗度 Ha Abrasion 130	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 70
ヤング率 E (10^8N/m^2) Young's Modulus 789	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 317	
ポアソン比 σ Poisson Ratio 0.246	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 35/31
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.55
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.14 5	
320	0.44 7	0.13 4
330	0.70 1	0.41 1
340	0.84 6	0.65 9
350	0.92 9	0.83 2
360	0.96 1	0.90 6
370	0.97 9	0.94 9
380	0.98 5	0.96 4
390	0.99 2	0.98 2
400	0.99 5	0.98 9
420	0.99 7	0.99 2
440	0.99 7	0.99 2
460	0.99 7	0.99 2
480	0.99 7	0.99 2
500	0.99 8	0.99 6
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 5	0.98 9
1500	0.98 5	0.96 4
2000	0.96 7	0.92 0

607567 Schott Type	nd 1.60738	ν d 56.7	nF−nC 0.01072
SK2	ne 1.60994	ν e 56.4	nF'−nC' 0.01082

屈折率 Refractive Indices		
nt	1014.0	1.59555
nA'	768.2	1.60046
nr	706.5	1.60230
nC	656.3	1.60413
nC'	643.9	1.60465
nD	589.3	1.60728
nd	587.6	1.60738
ne	546.1	1.60994
nF	486.1	1.61485
nF'	480.0	1.61547
ng	435.8	1.62073
nG'	434.1	
nh	404.7	1.62561
ni	365.0	1.63398

分散式の常数 Constans of Dispersion Formula	
A0	2.5409528
A1	$-9.6968315 \times 10^{-3}$
A2	1.4814260×10^{-2}
A3	4.3251578×10^{-4}
A4	$-2.4028620 \times 10^{-5}$
A5	1.5238211×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0102
$\Delta\theta$ C,A'	−0.0023
$\Delta\theta$ g,d	−0.0037
$\Delta\theta$ g,F	−0.0039
$\Delta\theta$ i,g	−0.0150

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00858	0.00367	0.00325	0.00581
θ C,t	θ C,A'	θ d,C	θ e,C
0.800	0.342	0.303	0.542
ng−nd	ng−nF	nh−ng	ni−ng
0.01335	0.00588	0.00488	0.01325
θ g,d	θ g,F	θ h,g	θ i,g
1.245	0.549	0.455	1.236
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00910	0.00529	0.00553	0.01851
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.841	0.489	0.511	1.711

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	568 (6)	転移点 Tg (℃) Transformation Point	658
ビッカース硬さ Hv Vickers Hardness	573	屈伏点 At (℃) Yielding Point	697
磨耗度 Ha Abrasion	130	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	69
ヤング率 E (10^8N/m^2) Young's Modulus	782	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	314		
ポアソン比 σ Poisson Ratio	0.246	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	34/30
耐酸性(粉末法) RA Acid Resistance	3	比重 S.g Specific Gravity	3.53
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290	0.19 6	0.01 7
300	0.39 2	0.09 6
310	0.66 3	0.35 7
320	0.81 2	0.59 5
330	0.96 4	0.91 3
340	0.94 3	0.86 4
350	0.96 0	0.90 3
360	0.96 8	0.92 3
370	0.97 4	0.93 7
380	0.97 8	0.94 7
390	0.98 1	0.95 4
400	0.98 2	0.95 7
420	0.98 2	0.95 7
440	0.98 2	0.95 7
460	0.98 8	0.97 1
480	0.99 2	0.98 2
500	0.99 2	0.98 2
550	0.99 2	0.98 2
600	0.99 2	0.98 2
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 5	0.98 9
1500	0.98 8	0.97 1
2000	0.97 7	0.94 4

609589 Schott Type	nd	1.60881	ν d	58.9	nF−nC	0.01034
SK3	ne	1.61128	ν e	58.6	nF'−nC'	0.01043

屈折率 Refractive Indices		
nt	1014.0	1.59723
nA'	768.2	1.60208
nr	706.5	1.60388
nC	656.3	1.60567
nC'	643.9	1.60617
nD	589.3	1.60872
nd	587.6	1.60881
ne	546.1	1.61128
nF	486.1	1.61601
nF'	480.0	1.61660
ng	435.8	1.62163
nG'	434.1	
nh	404.7	1.62631
ni	365.0	1.63428

分散式の常数 Constans of Dispersion Formula	
A0	2.5462631
A1	$-9.7165459 \times 10^{-3}$
A2	1.5122791×10^{-2}
A3	1.6339506×10^{-4}
A4	8.3851443×10^{-6}
A5	$-1.1042833 \times 10^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0046
$\Delta\theta$ C,A'	−0.0001
$\Delta\theta$ g,d	−0.0048
$\Delta\theta$ g,F	−0.0056
$\Delta\theta$ i,g	−0.0104

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00844	0.00359	0.00314	0.00561
θ C,t	θ C,A'	θ d,C	θ e,C
0.816	0.347	0.304	0.543
ng−nd	ng−nF	nh−ng	ni−ng
0.01282	0.00562	0.00468	0.01265
θ g,d	θ g,F	θ h,g	θ i,g
1.240	0.544	0.453	1.223
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00894	0.00511	0.00532	0.01768
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.857	0.490	0.510	1.695

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	526 (5)	転移点 Tg (℃) Transformation Point	654
ビッカース硬さ Hv Vickers Hardness	525	屈伏点 At (℃) Yielding Point	692
磨耗度 Ha Abrasion	140	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	73
ヤング率 E (10^8N/m^2) Young's Modulus	826	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	327		
ポアソン比 σ Poisson Ratio	0.263	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	36/31
耐酸性(粉末法) RA Acid Resistance	4	比重 S.g Specific Gravity	3.51
耐候性(表面法) DW Weather Resistance	2	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300	0.01 5	
310	0.15 4	
320	0.41 4	0.11 0
330	0.63 1	0.31 7
340	0.77 2	0.52 5
350	0.86 7	0.70 0
360	0.91 9	0.81 0
370	0.94 8	0.87 7
380	0.96 3	0.91 0
390	0.97 1	0.93 0
400	0.97 7	0.94 4
420	0.98 2	0.95 7
440	0.98 5	0.96 4
460	0.98 5	0.96 4
480	0.98 8	0.97 1
500	0.99 0	0.97 5
550	0.99 1	0.97 8
600	0.99 4	0.98 5
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 8	0.94 7

613586 Schott Type	nd 1.61272	ν d 58.6	nF−nC 0.01046
K-SK4	ne 1.61521	ν e 58.3	nF'−nC' 0.01055

屈折率 Refractive Indices		
nt	1014.0	1.60107
nA'	768.2	1.60592
nr	706.5	1.60773
nC	656.3	1.60954
nC'	643.9	1.61005
nD	589.3	1.61263
nd	587.6	1.61272
ne	546.1	1.61521
nF	486.1	1.62000
nF'	480.0	1.62060
ng	435.8	1.62570
nG'	434.1	
nh	404.7	1.63044
ni	365.0	1.63849

分散式の常数 Constans of Dispersion Formula	
A0	2.5564282
A1	$-8.6472663 \times 10^{-3}$
A2	1.6443872×10^{-2}
A3	$-1.6346553 \times 10^{-4}$
A4	5.5351445×10^{-5}
A5	$-2.5967360 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0097
$\Delta\theta$ C,A'	−0.0008
$\Delta\theta$ g,d	−0.0043
$\Delta\theta$ g,F	−0.0047
$\Delta\theta$ i,g	−0.0134

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00847	0.00362	0.00318	0.00567
θ C,t	θ C,A'	θ d,C	θ e,C
0.810	0.346	0.304	0.542
ng−nd	ng−nF	nh−ng	ni−ng
0.01298	0.00570	0.00474	0.01279
θ g,d	θ g,F	θ h,g	θ i,g
1.241	0.545	0.453	1.223
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00898	0.00516	0.00539	0.01789
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.851	0.489	0.511	1.696

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 570 (6)	転移点 Tg (℃) Transformation Point 660
ビッカース硬さ Hv Vickers Hardness 533	屈伏点 At (℃) Yielding Point 708
磨耗度 Ha Abrasion 140	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 76
ヤング率 E (10^8N/m^2) Young's Modulus 811	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 320	
ポアソン比 σ Poisson Ratio 0.268	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 34/29
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.58
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280	0.02 2	
290	0.12 2	
300	0.32 9	0.06 2
310	0.54 0	0.21 4
320	0.70 8	0.42 3
330	0.82 9	0.62 5
340	0.90 1	0.77 1
350	0.94 3	0.86 4
360	0.96 5	0.91 6
370	0.97 8	0.94 7
380	0.98 5	0.96 4
390	0.98 8	0.97 1
400	0.99 1	0.97 8
420	0.99 1	0.97 8
440	0.99 1	0.97 8
460	0.99 5	0.98 9
480	0.99 5	0.98 9
500	0.99 7	0.99 2
550	0.99 7	0.99 2
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 1	0.93 0

589612 Schott Type	nd 1.58913	ν d 61.2	nF−nC 0.00962
K-SK5	ne 1.59143	ν e 61.0	nF'−nC' 0.00969

屈折率 Refractive Indices

nt	1014.0	1.57814
nA'	768.2	1.58281
nr	706.5	1.58451
nC	656.3	1.58619
nC'	643.9	1.58666
nD	589.3	1.58905
nd	587.6	1.58913
ne	546.1	1.59143
nF	486.1	1.59581
nF'	480.0	1.59635
ng	435.8	1.60100
nG'	434.1	
nh	404.7	1.60530
ni	365.0	1.61264

分散式の常数 Constans of Dispersion Formula

A0	2.4873879
A1	$-1.0162672 \times 10^{-2}$
A2	1.3795821×10^{-2}
A3	1.8007148×10^{-4}
A4	$-2.1305493 \times 10^{-6}$
A5	5.6292570×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0049
$\Delta\theta$ C,A'	0.0014
$\Delta\theta$ g,d	−0.0060
$\Delta\theta$ g,F	−0.0061
$\Delta\theta$ i,g	−0.0055

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.00805	0.00338	0.00294	0.00524
θ C,t	θ C,A'	θ d,C	θ e,C
0.837	0.351	0.306	0.545
ng−nd	ng−nF	nh−ng	ni−ng
0.01187	0.00519	0.00430	0.01164
θ g,d	θ g,F	θ h,g	θ i,g
1.234	0.540	0.447	1.210
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00852	0.00477	0.00492	0.01629
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.879	0.492	0.508	1.681

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	661 (7)
ビッカース硬さ Hv Vickers Hardness	698
磨耗度 Ha Abrasion	110
ヤング率 E (10^8N/m^2) Young's Modulus	841
剛性率 G (10^8N/m^2) Modulus of Rigidity	336
ポアソン比 σ Poisson Ratio	0.252

化学的性質 Chemical Properties

耐水性(粉末法) RW Water Resistance	2
耐酸性(粉末法) RA Acid Resistance	4
耐候性(表面法) DW Weather Resistance	1

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	667
屈伏点 At (℃) Yielding Point	700
線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	67
備考 Remark s	

その他 Other Properties

泡 B Bubbles	
着色度 C Color Degree	34/29
比重 S.g Specific Gravity	3.32
脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280	0.05 8	
290	0.12 0	0.00 4
300	0.28 4	0.04 3
310	0.49 8	0.17 5
320	0.67 8	0.37 8
330	0.80 6	0.58 4
340	0.88 9	0.74 7
350	0.93 7	0.85 0
360	0.96 3	0.91 2
370	0.97 8	0.94 7
380	0.98 7	0.96 8
390	0.99 2	0.98 0
400	0.99 2	0.98 0
420	0.99 3	0.98 4
440	0.99 3	0.98 4
460	0.99 3	0.98 4
480	0.99 3	0.98 4
500	0.99 5	0.98 9
550	0.99 5	0.98 9
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 4
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 5
2000	0.97 9	0.94 9

607595 Schott Type	nd 1.60729	ν d 59.5	nF−nC 0.01021
K-SK7	ne 1.60973	ν e 59.3	nF'−nC' 0.01029

屈折率 Refractive Indices		
nt	1014.0	1.59581
nA'	768.2	1.60062
nr	706.5	1.60241
nC	656.3	1.60418
nC'	643.9	1.60468
nD	589.3	1.60720
nd	587.6	1.60729
ne	546.1	1.60973
nF	486.1	1.61439
nF'	480.0	1.61497
ng	435.8	1.61994
nG'	434.1	
nh	404.7	1.62454
ni	365.0	1.63236

分散式の常数 Constans of Dispersion Formula	
A0	2.5409007
A1	$-9.2687497 \times 10^{-3}$
A2	1.5714900×10^{-2}
A3	$-8.8800332 \times 10^{-5}$
A4	4.3287422×10^{-5}
A5	$-1.9899345 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0039
$\Delta\theta$ C,A'	0.0007
$\Delta\theta$ g,d	−0.0045
$\Delta\theta$ g,F	−0.0047
$\Delta\theta$ i,g	−0.0127

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00837	0.00356	0.00311	0.00555
θ C,t	θ C,A'	θ d,C	θ e,C
0.820	0.349	0.305	0.544
ng−nd	ng−nF	nh−ng	ni−ng
0.01265	0.00555	0.00460	0.01242
θ g,d	θ g,F	θ h,g	θ i,g
1.239	0.544	0.451	1.216
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00887	0.00505	0.00524	0.01739
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.862	0.491	0.509	1.690

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	563 (6)	転移点 Tg (℃) Transformation Point	656
ビッカース硬さ Hv Vickers Hardness	555	屈伏点 At (℃) Yielding Point	701
磨耗度 Ha Abrasion	130	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	71
ヤング率 E (10^8N/m^2) Young's Modulus	847	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	335		
ポアソン比 σ Poisson Ratio	0.263	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	35/30
耐酸性(粉末法) RA Acid Resistance	5	比重 S.g Specific Gravity	3.47
耐候性(表面法) DW Weather Resistance	2	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290	0.01 3	
300	0.13 8	
310	0.37 1	0.08 4
320	0.58 2	0.25 8
330	0.75 3	0.49 2
340	0.84 6	0.65 9
350	0.91 5	0.80 1
360	0.94 3	0.86 4
370	0.96 4	0.91 3
380	0.97 4	0.93 7
390	0.97 7	0.94 4
400	0.98 1	0.95 4
420	0.98 2	0.95 7
440	0.98 2	0.95 7
460	0.98 5	0.96 4
480	0.98 5	0.96 4
500	0.98 8	0.97 1
550	0.99 1	0.97 8
600	0.99 2	0.98 2
650	0.99 2	0.98 2
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.98 5	0.96 4
1500	0.97 8	0.94 7
2000	0.95 4	0.89 0

614551 Schott Type	nd 1.61405	ν d 55.1	nF−nC 0.01114
SK9	ne 1.61670	ν e 54.8	nF'−nC' 0.01125

屈折率 Refractive Indices

nt	1014.0	1.60187
nA'	768.2	1.60689
nr	706.5	1.60878
nC	656.3	1.61069
nC'	643.9	1.61122
nD	589.3	1.61395
nd	587.6	1.61405
ne	546.1	1.61670
nF	486.1	1.62183
nF'	480.0	1.62247
ng	435.8	1.62796
nG'	434.1	
nh	404.7	1.63308
ni	365.0	1.64189

分散式の常数 Constans of Dispersion Formula

A0	2.5598616
A1	$-9.2684848 \times 10^{-3}$
A2	1.5741610×10^{-2}
A3	3.7696688×10^{-4}
A4	$-1.4527816 \times 10^{-5}$
A5	1.2396803×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	−0.0116
$\Delta\theta$ C,A'	−0.0018
$\Delta\theta$ g,d	−0.0035
$\Delta\theta$ g,F	−0.0045
$\Delta\theta$ i,g	−0.0125

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.00882	0.00380	0.00336	0.00601
θ C,t	θ C,A'	θ d,C	θ e,C
0.792	0.341	0.302	0.539
ng−nd	ng−nF	nh−ng	ni−ng
0.01391	0.00613	0.00512	0.01393
θ g,d	θ g,F	θ h,g	θ i,g
1.249	0.550	0.460	1.250
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00935	0.00548	0.00577	0.01942
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.831	0.487	0.513	1.726

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	501 (5)	転移点 Tg (℃) Transformation Point	647
ビッカース硬さ Hv Vickers Hardness	514	屈伏点 At (℃) Yielding Point	690
磨耗度 Ha Abrasion	140	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	70
ヤング率 E (10^8N/m^2) Young's Modulus	779	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	307		
ポアソン比 σ Poisson Ratio	0.267	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	34/31
耐酸性(粉末法) RA Acid Resistance	4	比重 S.g Specific Gravity	3.59
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310	0.03 7	
320	0.37 1	0.08 4
330	0.70 1	0.41 1
340	0.86 5	0.69 7
350	0.93 6	0.84 8
360	0.96 0	0.90 3
370	0.97 4	0.93 7
380	0.98 1	0.95 4
390	0.98 2	0.95 7
400	0.98 5	0.96 4
420	0.98 5	0.96 4
440	0.98 8	0.97 1
460	0.98 8	0.97 1
480	0.99 0	0.97 5
500	0.99 1	0.97 8
550	0.99 2	0.98 2
600	0.99 4	0.98 5
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 8	0.94 7

623569 Schott Type	nd 1.62280	ν d 56.9	nF−nC 0.01095
SK10	ne 1.62541	ν e 56.6	nF'−nC' 0.01105

屈折率 Refractive Indices		
nt	1014.0	1.61070
nA'	768.2	1.61572
nr	706.5	1.61760
nC	656.3	1.61948
nC'	643.9	1.62001
nD	589.3	1.62270
nd	587.6	1.62280
ne	546.1	1.62541
nF	486.1	1.63043
nF'	480.0	1.63106
ng	435.8	1.63643
nG'	434.1	
nh	404.7	1.64142
ni	365.0	1.64997

分散式の常数 Constans of Dispersion Formula	
A0	2.5882212
A1	−9.4630395 ×10 $^{-3}$
A2	1.6107294 ×10 $^{-2}$
A3	2.0019202 ×10 $^{-4}$
A4	7.6743138 ×10 $^{-6}$
A5	7.8250138 ×10 $^{-9}$

異常分散性 Deviation of Relative Partial Dispersions	
Δ θ C,t	−0.0097
Δ θ C,A'	−0.0016
Δ θ g,d	−0.0039
Δ θ g,F	−0.0042
Δ θ i,g	−0.0128

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00878	0.00376	0.00332	0.00593
θ C,t	θ C,A'	θ d,C	θ e,C
0.802	0.343	0.303	0.542
ng−nd	ng−nF	nh−ng	ni−ng
0.01363	0.00600	0.00499	0.01354
θ g,d	θ g,F	θ h,g	θ i,g
1.245	0.548	0.456	1.237
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00931	0.00540	0.00565	0.01891
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.843	0.489	0.511	1.711

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	560 (6)	転移点 Tg (℃) Transformation Point	645
ビッカース硬さ Hv Vickers Hardness	579	屈伏点 At (℃) Yielding Point	678
磨耗度 Ha Abrasion	160	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃)	79
ヤング率 E (10^{8}N/m^2) Young's Modulus	808	備考 Remark s	
剛性率 G (10^{8}N/m^2) Modulus of Rigidity	323		
ポアソン比 σ Poisson Ratio	0.251	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	35/31
耐酸性(粉末法) RA Acid Resistance	4	比重 S.g Specific Gravity	3.66
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.06 $_6$	
320	0.34 $_0$	0.06 $_7$
330	0.64 $_4$	0.33 $_3$
340	0.80 $_0$	0.57 $_3$
350	0.90 $_1$	0.77 $_1$
360	0.93 $_6$	0.84 $_8$
370	0.96 $_1$	0.90 $_6$
380	0.97 $_1$	0.93 $_0$
390	0.98 $_0$	0.95 $_0$
400	0.98 $_5$	0.96 $_4$
420	0.98 $_8$	0.97 $_1$
440	0.98 $_8$	0.97 $_1$
460	0.98 $_8$	0.97 $_1$
480	0.99 $_0$	0.97 $_5$
500	0.99 $_0$	0.97 $_5$
550	0.99 $_1$	0.97 $_8$
600	0.99 $_4$	0.98 $_5$
650	0.99 $_5$	0.98 $_9$
700	0.99 $_5$	0.98 $_9$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_8$	0.99 $_6$
2000	0.98 $_5$	0.96 $_4$

564608 Schott Type K-SK11	nd 1.56384	ν d 60.8	nF-nC 0.00928
	ne 1.56605	ν e 60.5	nF'-nC' 0.00936

屈折率 Refractive Indices		
nt	1014.0	1.55327
nA'	768.2	1.55777
nr	706.5	1.55940
nC	656.3	1.56101
nC'	643.9	1.56146
nD	589.3	1.56376
nd	587.6	1.56384
ne	546.1	1.56605
nF	486.1	1.57029
nF'	480.0	1.57082
ng	435.8	1.57531
nG'	434.1	
nh	404.7	1.57947
ni	365.0	1.58655

分散式の常数 Constans of Dispersion Formula	
A0	2.4119046
A1	$-1.0722565 \times 10^{-2}$
A2	1.1575579×10^{-2}
A3	5.8553562×10^{-4}
A4	$-5.1178420 \times 10^{-5}$
A5	2.6592419×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0044
$\Delta\theta$ C,A'	−0.0003
$\Delta\theta$ g,d	−0.0049
$\Delta\theta$ g,F	−0.0054
$\Delta\theta$ i,g	−0.0080

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.00774	0.00324	0.00283	0.00504
θ C,t	θ C,A'	θ d,C	θ e,C
0.834	0.349	0.305	0.543
ng-nd	ng-nF	nh-ng	ni-ng
0.01147	0.00502	0.00416	0.01124
θ g,d	θ g,F	θ h,g	θ i,g
1.236	0.541	0.448	1.211
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.00819	0.00459	0.00477	0.01573
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.875	0.490	0.510	1.681

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 559 (6)	転移点 Tg (℃) Transformation Point 603
ビッカース硬さ Hv Vickers Hardness 527	屈伏点 At (℃) Yielding Point 648
磨耗度 Ha Abrasion 120	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 77
ヤング率 E (10^8N/m^2) Young's Modulus 806	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 326	
ポアソン比 σ Poisson Ratio 0.238	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 35/30
耐酸性(粉末法) RA Acid Resistance 2	比重 S.g Specific Gravity 3.06
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290	0.01 3	
300	0.13 8	
310	0.37 1	0.08 4
320	0.57 3	0.24 9
330	0.75 3	0.49 2
340	0.85 6	0.67 8
350	0.92 3	0.82 0
360	0.95 7	0.89 6
370	0.97 1	0.93 0
380	0.98 2	0.95 7
390	0.98 8	0.97 1
400	0.98 8	0.97 1
420	0.98 8	0.97 1
440	0.99 0	0.97 5
460	0.99 1	0.97 8
480	0.99 1	0.97 8
500	0.99 4	0.98 5
550	0.99 5	0.98 9
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 5	0.98 9
1500	0.99 0	0.97 5
2000	0.96 4	0.91 3

583593 Schott Type	nd 1.58313	ν d 59.3	nF−nC 0.00983
SK12	ne 1.58548	ν e 59.1	nF'−nC' 0.00991

屈折率 Refractive Indices		
nt	1014.0	1.57209
nA'	768.2	1.57674
nr	706.5	1.57845
nC	656.3	1.58014
nC'	643.9	1.58062
nD	589.3	1.58304
nd	587.6	1.58313
ne	546.1	1.58548
nF	486.1	1.58997
nF'	480.0	1.59053
ng	435.8	1.59532
nG'	434.1	
nh	404.7	1.59975
ni	365.0	1.60730

分散式の常数 Constans of Dispersion Formula	
A0	2.4686816
A1	$-1.0094174 \times 10^{-2}$
A2	1.3146927×10^{-2}
A3	4.2161799×10^{-4}
A4	$-2.4913233 \times 10^{-5}$
A5	1.3187694×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0040
$\Delta\theta$ C,A'	−0.0019
$\Delta\theta$ g,d	−0.0037
$\Delta\theta$ g,F	−0.0042
$\Delta\theta$ i,g	−0.0116

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00805	0.00340	0.00299	0.00534
θ C,t	θ C,A'	θ d,C	θ e,C
0.819	0.346	0.304	0.543
ng−nd	ng−nF	nh−ng	ni−ng
0.01219	0.00535	0.00443	0.01198
θ g,d	θ g,F	θ h,g	θ i,g
1.240	0.544	0.451	1.219
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00853	0.00486	0.00505	0.01677
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.861	0.490	0.510	1.692

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 576 (6)	転移点 Tg (℃) Transformation Point 612
ビッカース硬さ Hv Vickers Hardness 582	屈伏点 At (℃) Yielding Point 659
磨耗度 Ha Abrasion 130	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 78
ヤング率 E (10^8N/m^2) Young's Modulus 816	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 326	
ポアソン比 σ Poisson Ratio 0.250	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 2	着色度 C Color Degree 35/30
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.26
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300	0.02 9	
310	0.21 4	0.02 1
320	0.48 7	0.16 6
330	0.70 1	0.41 1
340	0.82 6	0.62 0
350	0.90 1	0.77 1
360	0.94 3	0.86 4
370	0.96 5	0.91 6
380	0.97 4	0.93 7
390	0.98 1	0.95 4
400	0.98 5	0.96 4
420	0.98 8	0.97 1
440	0.99 0	0.97 5
460	0.99 0	0.97 5
480	0.99 4	0.98 5
500	0.99 5	0.98 9
550	0.99 7	0.99 2
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.98 2	0.95 7

603607 Schott Type	nd 1.60311	ν d 60.7	nF-nC 0.00994
K-SK14	ne 1.60548	ν e 60.4	nF'-nC' 0.01002

屈折率 Refractive Indices		
nt	1014.0	1.59181
nA'	768.2	1.59660
nr	706.5	1.59835
nC	656.3	1.60008
nC'	643.9	1.60056
nD	589.3	1.60302
nd	587.6	1.60311
ne	546.1	1.60548
nF	486.1	1.61002
nF'	480.0	1.61058
ng	435.8	1.61540
nG'	434.1	
nh	404.7	1.61986
ni	365.0	1.62742

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.00827	0.00348	0.00303	0.00540
θ C,t	θ C,A'	θ d,C	θ e,C
0.832	0.350	0.305	0.543
ng-nd	ng-nF	nh-ng	ni-ng
0.01229	0.00538	0.00446	0.01202
θ g,d	θ g,F	θ h,g	θ i,g
1.236	0.541	0.449	1.209
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.00875	0.00492	0.00510	0.01684
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.873	0.491	0.509	1.681

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280	0.06 3	0.00 1
290	0.12 8	0.00 5
300	0.30 3	0.05 0
310	0.51 1	0.18 7
320	0.69 3	0.40 0
330	0.80 0	0.57 4
340	0.88 7	0.74 2
350	0.93 3	0.84 1
360	0.96 3	0.91 0
370	0.97 7	0.94 3
380	0.98 6	0.96 7
390	0.99 0	0.97 6
400	0.99 2	0.98 1
420	0.99 5	0.98 8
440	0.99 5	0.98 8
460	0.99 5	0.98 8
480	0.99 5	0.98 8
500	0.99 7	0.99 2
550	0.99 7	0.99 3
600	0.99 7	0.99 4
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 5	0.98 8
2000	0.97 7	0.94 5

分散式の常数 Constans of Dispersion Formula	
A0	2.5308132
A1	$-1.0612670 \times 10^{-2}$
A2	1.4144456×10^{-2}
A3	2.0737292×10^{-4}
A4	4.8161489×10^{-6}
A5	$-2.4653755 \times 10^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0027
$\Delta\theta$ C,A'	0.0008
$\Delta\theta$ g,d	-0.0046
$\Delta\theta$ g,F	-0.0052
$\Delta\theta$ i,g	-0.0106

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 539 (5)	転移点 Tg (℃) Transformation Point 646
ビッカース硬さ Hv Vickers Hardness 573	屈伏点 At (℃) Yielding Point 684
磨耗度 Ha Abrasion 130	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 73
ヤング率 E (10^8N/m^2) Young's Modulus 857	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 340	
ポアソン比 σ Poisson Ratio 0.260	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 2	着色度 C Color Degree 35/29
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.44
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

623581 Schott Type	nd 1.62299	ν d 58.1	nF−nC 0.01072
K-SK15	ne 1.62554	ν e 57.9	nF'−nC' 0.01080

屈折率 Refractive Indices		
nt	1014.0	1.61108
nA'	768.2	1.61604
nr	706.5	1.61789
nC	656.3	1.61973
nC'	643.9	1.62026
nD	589.3	1.62289
nd	587.6	1.62299
ne	546.1	1.62554
nF	486.1	1.63045
nF'	480.0	1.63106
ng	435.8	1.63628
nG'	434.1	
nh	404.7	1.64112
ni	365.0	1.64942

分散式の常数 Constans of Dispersion Formula	
A0	2.5911207
A1	−1.0159791 ×10 $^{-2}$
A2	1.4870186 ×10 $^{-2}$
A3	5.0389129 ×10 $^{-4}$
A4	−4.1552509 ×10 $^{-5}$
A5	2.6451350 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δ θ C,t	−0.0104
Δ θ C,A'	−0.0022
Δ θ g,d	−0.0064
Δ θ g,F	−0.0064
Δ θ i,g	−0.0140

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00865	0.00369	0.00326	0.00581
θ C,t	θ C,A'	θ d,C	θ e,C
0.807	0.344	0.304	0.542
ng−nd	ng−nF	nh−ng	ni−ng
0.01329	0.00583	0.00484	0.01314
θ g,d	θ g,F	θ h,g	θ i,g
1.240	0.544	0.451	1.226
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00918	0.00528	0.00552	0.01836
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.850	0.489	0.511	1.700

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 473 (5)	転移点 Tg (℃) Transformation Point 649
ビッカース硬さ Hv Vickers Hardness 529	屈伏点 At (℃) Yielding Point 688
磨耗度 Ha Abrasion 160	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 80
ヤング率 E (10^{8}N/m^2) Young's Modulus 819	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 327	
ポアソン比 σ Poisson Ratio 0.254	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 2	着色度 C Color Degree 35/30
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.67
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290	0.02 $_2$	
300	0.13 $_8$	
310	0.35 $_0$	0.07 $_2$
320	0.55 $_9$	0.23 $_4$
330	0.73 $_3$	0.46 $_0$
340	0.83 $_9$	0.64 $_6$
350	0.90 $_5$	0.78 $_0$
360	0.94 $_6$	0.87 $_0$
370	0.96 $_7$	0.92 $_0$
380	0.97 $_8$	0.94 $_7$
390	0.98 $_5$	0.96 $_4$
400	0.98 $_8$	0.97 $_1$
420	0.99 $_1$	0.97 $_8$
440	0.99 $_2$	0.98 $_2$
460	0.99 $_5$	0.98 $_9$
480	0.99 $_5$	0.98 $_9$
500	0.99 $_7$	0.99 $_2$
550	0.99 $_7$	0.99 $_2$
600	0.99 $_8$	0.99 $_6$
650	0.99 $_8$	0.99 $_6$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_5$	0.98 $_9$
2000	0.97 $_1$	0.93 $_0$

620603 Schott Type K-SK16	nd 1.62041	ν d 60.3	nF-nC 0.01029
	ne 1.62286	ν e 60.1	nF'-nC' 0.01037

屈折率 Refractive Indices		
nt	1014.0	1.60874
nA'	768.2	1.61367
nr	706.5	1.61548
nC	656.3	1.61727
nC'	643.9	1.61777
nD	589.3	1.62032
nd	587.6	1.62041
ne	546.1	1.62286
nF	486.1	1.62756
nF'	480.0	1.62814
ng	435.8	1.63313
nG'	434.1	
nh	404.7	1.63774
ni	365.0	1.64557

分散式の常数 Constans of Dispersion Formula	
A0	2.5843629
A1	$-1.0743741 \times 10^{-2}$
A2	1.4943604×10^{-2}
A3	2.0007994×10^{-4}
A4	4.5624595×10^{-6}
A5	$-1.2296939 \times 10^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0015
$\Delta\theta$ C,A'	0.0010
$\Delta\theta$ g,d	−0.0057
$\Delta\theta$ g,F	−0.0057
$\Delta\theta$ i,g	−0.0139

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.00853	0.00360	0.00314	0.00559
θ C,t	θ C,A'	θ d,C	θ e,C
0.829	0.350	0.305	0.543
ng-nd	ng-nF	nh-ng	ni-ng
0.01272	0.00557	0.00461	0.01244
θ g,d	θ g,F	θ h,g	θ i,g
1.236	0.541	0.448	1.209
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.00903	0.00509	0.00528	0.01743
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.871	0.491	0.509	1.681

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 490 (5)	転移点 Tg (℃) Transformation Point 653
ビッカース硬さ Hv Vickers Hardness 498	屈伏点 At (℃) Yielding Point 688
磨耗度 Ha Abrasion 150	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 83
ヤング率 E (10^8N/m^2) Young's Modulus 881	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 348	
ポアソン比 σ Poisson Ratio 0.267	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 3	着色度 C Color Degree 35/29
耐酸性(粉末法) RA Acid Resistance 5	比重 S.g Specific Gravity 3.60
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290	0.03 2	
300	0.18 3	0.01 4
310	0.42 5	0.11 8
320	0.61 5	0.29 7
330	0.77 2	0.52 5
340	0.85 4	0.67 5
350	0.91 5	0.80 1
360	0.94 6	0.87 0
370	0.96 3	0.91 0
380	0.97 5	0.94 0
390	0.98 1	0.95 4
400	0.98 5	0.96 4
420	0.98 5	0.96 4
440	0.98 8	0.97 1
460	0.98 8	0.97 1
480	0.99 0	0.97 5
500	0.99 1	0.97 8
550	0.99 1	0.97 8
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 4	0.93 7

639555 Schott Type K-SK18	nd 1.63854	νd 55.5	nF-nC 0.01151
	ne 1.64128	νe 55.2	nF'-nC' 0.01161

屈折率 Refractive Indices

nt	1014.0	1.62584
nA'	768.2	1.63112
nr	706.5	1.63309
nC	656.3	1.63506
nC'	643.9	1.63562
nD	589.3	1.63844
nd	587.6	1.63854
ne	546.1	1.64128
nF	486.1	1.64657
nF'	480.0	1.64723
ng	435.8	1.65289
nG'	434.1	
nh	404.7	1.65818
ni	365.0	1.66731

分散式の常数 Constans of Dispersion Formula

A0	2.6384210
A1	$-1.0827570 \times 10^{-2}$
A2	1.6058787×10^{-2}
A3	5.0122569×10^{-4}
A4	$-3.0687755 \times 10^{-5}$
A5	2.2546387×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions

Δθ C,t	−0.0040
Δθ C,A'	−0.0010
Δθ g,d	−0.0047
Δθ g,F	−0.0051
Δθ i,g	−0.0073

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC-nt	nC-nA'	nd-nC	ne-nC
0.00922	0.00394	0.00348	0.00622
θ C,t	θ C,A'	θ d,C	θ e,C
0.801	0.342	0.302	0.540
ng-nd	ng-nF	nh-ng	ni-ng
0.01435	0.00632	0.00529	0.01442
θ g,d	θ g,F	θ h,g	θ i,g
1.247	0.549	0.460	1.253
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.00978	0.00566	0.00595	0.02008
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.842	0.488	0.512	1.730

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 574 (6)	転移点 Tg (℃) Transformation Point 647
ビッカース硬さ Hv Vickers Hardness 566	屈伏点 At (℃) Yielding Point 688
磨耗度 Ha Abrasion 160	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 81
ヤング率 E (10^8N/m^2) Young's Modulus 860	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 338	
ポアソン比 σ Poisson Ratio 0.272	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 3	着色度 C Color Degree 38/33
耐酸性(粉末法) RA Acid Resistance 5	比重 S.g Specific Gravity 3.69
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.05 0	
340	0.12 6	
350	0.42 5	0.11 8
360	0.66 9	0.36 6
370	0.82 6	0.62 0
380	0.90 7	0.78 3
390	0.95 0	0.88 0
400	0.97 1	0.93 0
420	0.98 8	0.97 1
440	0.99 0	0.97 5
460	0.99 1	0.97 8
480	0.99 4	0.98 5
500	0.99 4	0.98 5
550	0.99 5	0.98 9
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 7	0.99 2
1500	0.99 2	0.98 2
2000	0.97 1	0.93 0

560612 Schott Type K-SK20	nd 1.55963	ν d 61.2	nF-nC 0.00914
	ne 1.56181	ν e 61.0	nF'-nC' 0.00921

屈折率 Refractive Indices		
nt	1014.0	1.54923
nA'	768.2	1.55364
nr	706.5	1.55525
nC	656.3	1.55684
nC'	643.9	1.55729
nD	589.3	1.55955
nd	587.6	1.55963
ne	546.1	1.56181
nF	486.1	1.56598
nF'	480.0	1.56650
ng	435.8	1.57092
nG'	434.1	
nh	404.7	1.57501
ni	365.0	1.58197

分散式の常数 Constans of Dispersion Formula	
A0	2.3978213
A1	$-9.7050632 \times 10^{-3}$
A2	1.2328613×10^{-2}
A3	3.1156106×10^{-4}
A4	$-1.7469483 \times 10^{-5}$
A5	1.0725844×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0008
$\Delta\theta$ C,A'	0.0001
$\Delta\theta$ g,d	−0.0047
$\Delta\theta$ g,F	−0.0052
$\Delta\theta$ i,g	−0.0066

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.00761	0.00320	0.00279	0.00497
θ C,t	θ C,A'	θ d,C	θ e,C
0.833	0.350	0.305	0.544
ng-nd	ng-nF	nh-ng	ni-ng
0.01129	0.00494	0.00409	0.01105
θ g,d	θ g,F	θ h,g	θ i,g
1.235	0.540	0.447	1.209
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.00806	0.00452	0.00469	0.01547
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.875	0.491	0.509	1.680

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 562 (6)	転移点 Tg (℃) Transformation Point 619
ビッカース硬さ Hv Vickers Hardness 572	屈伏点 At (℃) Yielding Point 657
磨耗度 Ha Abrasion 120	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 74
ヤング率 E (10^8N/m^2) Young's Modulus 789	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 319	
ポアソン比 σ Poisson Ratio 0.235	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 2	着色度 C Color Degree 33/29
耐酸性(粉末法) RA Acid Resistance 2	比重 S.g Specific Gravity 3.03
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290	0.06 6	
300	0.28 9	0.04 5
310	0.55 2	0.22 6
320	0.75 3	0.49 2
330	0.86 0	0.68 6
340	0.92 3	0.82 0
350	0.95 7	0.89 6
360	0.97 1	0.93 0
370	0.98 0	0.95 0
380	0.98 2	0.95 7
390	0.98 5	0.96 4
400	0.98 8	0.97 1
420	0.98 8	0.97 1
440	0.98 8	0.97 1
460	0.99 0	0.97 5
480	0.99 1	0.97 8
500	0.99 1	0.97 8
550	0.99 4	0.98 5
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 1	0.97 8
2000	0.96 3	0.91 0

620603 Schott Type K-SK16RH	nd 1.62041	ν d 60.3	nF-nC 0.01029
	ne 1.62286	ν e 60.1	nF'-nC' 0.01037

屈折率 Refractive Indices		
nt	1014.0	1.60862
nA'	768.2	1.61364
nr	706.5	1.61546
nC	656.3	1.61726
nC'	643.9	1.61777
nD	589.3	1.62032
nd	587.6	1.62041
ne	546.1	1.62286
nF	486.1	1.62755
nF'	480.0	1.62814
ng	435.8	1.63312
nG'	434.1	
nh	404.7	1.63772
ni	365.0	1.64557

分散式の常数 Constans of Dispersion Formula	
A0	2.5848110
A1	$-1.1486919 \times 10^{-2}$
A2	1.4859018×10^{-2}
A3	2.1677739×10^{-4}
A4	$-2.4466918 \times 10^{-7}$
A5	3.1088303×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0122
$\Delta\theta$ C,A'	0.0029
$\Delta\theta$ g,d	−0.0066
$\Delta\theta$ g,F	−0.0057
$\Delta\theta$ i,g	−0.0129

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.00864	0.00362	0.00315	0.00560
θ C,t	θ C,A'	θ d,C	θ e,C
0.840	0.352	0.306	0.544
ng-nd	ng-nF	nh-ng	ni-ng
0.01271	0.00557	0.00460	0.01245
θ g,d	θ g,F	θ h,g	θ i,g
1.235	0.541	0.447	1.210
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.00915	0.00509	0.00528	0.01743
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.882	0.491	0.509	1.681

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 624 (6)	転移点 Tg (℃) Transformation Point 653
ビッカース硬さ Hv Vickers Hardness 623	屈伏点 At (℃) Yielding Point 695
磨耗度 Ha Abrasion 130	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 72
ヤング率 E (10^8N/m^2) Young's Modulus 888	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 351	
ポアソン比 σ Poisson Ratio 0.266	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 2	着色度 C Color Degree 35/29
耐酸性(粉末法) RA Acid Resistance 5	比重 S.g Specific Gravity 3.50
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280	0.01 0	
290	0.08 6	
300	0.25 1	0.03 1
310	0.44 7	0.13 4
320	0.62 5	0.30 9
330	0.77 2	0.52 5
340	0.86 0	0.68 6
350	0.91 5	0.80 1
360	0.95 7	0.89 6
370	0.97 8	0.94 7
380	0.98 5	0.96 4
390	0.99 7	0.99 2
400	0.99 7	0.99 2
420	0.99 7	0.99 2
440	0.99 7	0.99 2
460	0.99 8	0.99 6
480	0.99 8	0.99 6
500	0.99 8	0.99 6
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 2	0.98 2
1500	0.97 8	0.94 7
2000	0.95 3	0.88 7

639555 Schott Type K-SK18RH	nd 1.63854	ν d 55.5	nF-nC 0.01151
	ne 1.64128	ν e 55.2	nF'-nC' 0.01162

屈折率 Refractive Indices		
nt	1014.0	1.62588
nA'	768.2	1.63111
nr	706.5	1.63309
nC	656.3	1.63506
nC'	643.9	1.63561
nD	589.3	1.63844
nd	587.6	1.63854
ne	546.1	1.64128
nF	486.1	1.64657
nF'	480.0	1.64723
ng	435.8	1.65289
nG'	434.1	
nh	404.7	1.65818
ni	365.0	1.66715

分散式の常数 Constans of Dispersion Formula	
A0	2.6353620
A1	$-9.1813172 \times 10^{-3}$
A2	1.8172495×10^{-2}
A3	$-1.8639212 \times 10^{-4}$
A4	7.4877018×10^{-5}
A5	$-3.8761228 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0074
$\Delta\theta$ C,A'	−0.0001
$\Delta\theta$ g,d	−0.0047
$\Delta\theta$ g,F	−0.0051
$\Delta\theta$ i,g	−0.0212

部分分散及び部分分散比
Partial Dispersions and Relative Partial Dispersions

nC-nt	nC-nA'	nd-nC	ne-nC
0.00918	0.00395	0.00348	0.00622
θ C,t	θ C,A'	θ d,C	θ e,C
0.798	0.343	0.302	0.540
ng-nd	ng-nF	nh-ng	ni-ng
0.01435	0.00632	0.00529	0.01426
θ g,d	θ g,F	θ h,g	θ i,g
1.247	0.549	0.460	1.239
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.00973	0.00567	0.00595	0.01992
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.837	0.488	0.512	1.714

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 580 (6)	転移点 Tg (℃) Transformation Point 656
ビッカース硬さ Hv Vickers Hardness 546	屈伏点 At (℃) Yielding Point 707
磨耗度 Ha Abrasion 130	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 84
ヤング率 E (10^8N/m^2) Young's Modulus 915	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 357	
ポアソン比 σ Poisson Ratio 0.281	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 36/30
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 3.32
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300	0.07 6	
310	0.25 5	0.03 3
320	0.44 7	0.13 4
330	0.63 7	0.32 4
340	0.78 6	0.54 7
350	0.87 3	0.71 4
360	0.93 2	0.83 8
370	0.96 0	0.90 3
380	0.97 1	0.93 0
390	0.98 1	0.95 4
400	0.98 5	0.96 4
420	0.98 8	0.97 1
440	0.98 8	0.97 1
460	0.99 0	0.97 5
480	0.99 2	0.98 2
500	0.99 5	0.98 9
550	0.99 5	0.98 9
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 5	0.98 9
1500	0.99 5	0.98 9
2000	0.97 4	0.93 7

526510 Schott Type	nd 1.52630	ν d 51.0	nF−nC 0.01032
KF2	ne 1.52876	ν e 50.7	nF'−nC' 0.01042

屈折率 Refractive Indices		
nt	1014.0	1.51507
nA'	768.2	1.51969
nr	706.5	1.52144
nC	656.3	1.52319
nC'	643.9	1.52369
nD	589.3	1.52621
nd	587.6	1.52630
ne	546.1	1.52876
nF	486.1	1.53351
nF'	480.0	1.53411
ng	435.8	1.53925
nG'	434.1	
nh	404.7	1.54408
ni	365.0	1.55249

分散式の常数 Constans of Dispersion Formula	
A0	2.2893616
A1	−7.7272348 ×10 $^{-3}$
A2	1.4259275 ×10 $^{-2}$
A3	1.4489878 ×10 $^{-4}$
A4	1.5659119 ×10 $^{-5}$
A5	2.7300957 ×10 $^{-8}$

異常分散性 Deviation of Relative Partial Dispersions	
Δ θ C,t	0.0027
Δ θ C,A'	0.0010
Δ θ g,d	−0.0055
Δ θ g,F	−0.0047
Δ θ i,g	−0.0120

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00812	0.00350	0.00311	0.00557
θ C,t	θ C,A'	θ d,C	θ e,C
0.787	0.339	0.301	0.540
ng−nd	ng−nF	nh−ng	ni−ng
0.01295	0.00574	0.00483	0.01324
θ g,d	θ g,F	θ h,g	θ i,g
1.255	0.556	0.468	1.283
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00862	0.00507	0.00535	0.01838
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.827	0.487	0.513	1.764

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 474 (5)	転移点 Tg (℃) Transformation Point 441
ビッカース硬さ Hv Vickers Hardness 472	屈伏点 At (℃) Yielding Point 498
磨耗度 Ha Abrasion 100	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 101
ヤング率 E (10^8N/m^2) Young's Modulus 636	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 267	
ポアソン比 σ Poisson Ratio 0.193	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 34/30
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 2.73
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290	0.04 $_8$	
300	0.31 $_9$	0.05 $_7$
310	0.62 $_5$	0.30 $_9$
320	0.81 $_2$	0.59 $_5$
330	0.91 $_5$	0.80 $_1$
340	0.96 $_1$	0.90 $_6$
350	0.98 $_0$	0.95 $_0$
360	0.98 $_2$	0.95 $_7$
370	0.99 $_1$	0.98 $_8$
380	0.99 $_5$	0.98 $_9$
390	0.99 $_5$	0.98 $_9$
400	0.99 $_5$	0.98 $_9$
420	0.99 $_4$	0.98 $_5$
440	0.99 $_5$	0.98 $_9$
460	0.99 $_7$	0.99 $_2$
480	0.99 $_7$	0.99 $_2$
500	0.99 $_8$	0.99 $_6$
550	0.99 $_8$	0.99 $_6$
600	0.99 $_8$	0.99 $_6$
650	0.99 $_8$	0.99 $_6$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_7$	0.99 $_2$
1500	0.99 $_5$	0.98 $_9$
2000	0.93 $_3$	0.84 $_2$

515546 Schott Type KF3	nd 1.51454	ν d 54.6	nF−nC 0.00942
	ne 1.51678	ν e 54.3	nF'−nC' 0.00951

屈折率 Refractive Indices		
nt	1014.0	1.50412
nA'	768.2	1.50846
nr	706.5	1.51008
nC	656.3	1.51169
nC'	643.9	1.51214
nD	589.3	1.51445
nd	587.6	1.51454
ne	546.1	1.51678
nF	486.1	1.52111
nF'	480.0	1.52165
ng	435.8	1.52629
nG'	434.1	
nh	404.7	1.53063
ni	365.0	1.53815

分散式の常数 Constans of Dispersion Formula	
A0	2.2595072
A1	$-8.7017925 \times 10^{-3}$
A2	1.1691949×10^{-2}
A3	5.0751817×10^{-4}
A4	$-4.0895778 \times 10^{-5}$
A5	2.6801217×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0026
$\Delta\theta$ C,A'	0.0006
$\Delta\theta$ g,d	−0.0058
$\Delta\theta$ g,F	−0.0056
$\Delta\theta$ i,g	−0.0078

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00757	0.00323	0.00285	0.00509
θ C,t	θ C,A'	θ d,C	θ e,C
0.804	0.343	0.303	0.540
ng−nd	ng−nF	nh−ng	ni−ng
0.01175	0.00518	0.00434	0.01186
θ g,d	θ g,F	θ h,g	θ i,g
1.247	0.550	0.461	1.259
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00802	0.00464	0.00487	0.01650
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.843	0.488	0.512	1.735

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	497 (5)	転移点 Tg (℃) Transformation Point	433
ビッカース硬さ Hv Vickers Hardness	484	屈伏点 At (℃) Yielding Point	486
磨耗度 Ha Abrasion	120	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	107
ヤング率 E (10^8N/m^2) Young's Modulus	637	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	261		
ポアソン比 σ Poisson Ratio	0.218	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	32/30
耐酸性(粉末法) RA Acid Resistance	2	比重 S.g Specific Gravity	2.61
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300	0.12 2	
310	0.60 0	0.27 9
320	0.83 9	0.64 6
330	0.93 6	0.84 8
340	0.96 7	0.92 0
350	0.97 7	0.94 4
360	0.98 2	0.95 7
370	0.98 2	0.95 7
380	0.98 5	0.96 4
390	0.98 8	0.97 1
400	0.98 8	0.97 1
420	0.98 8	0.97 1
440	0.98 8	0.97 1
460	0.98 8	0.97 1
480	0.99 0	0.97 5
500	0.99 0	0.97 5
550	0.99 1	0.97 8
600	0.99 4	0.98 5
650	0.99 4	0.98 5
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.99 4	0.98 5
1500	0.98 5	0.96 4
2000	0.92 9	0.83 2

534516 Schott Type KF4	nd 1.53358	ν d 51.6	nF−nC 0.01034
	ne 1.53603	ν e 51.3	nF'−nC' 0.01046

屈折率 Refractive Indices		
nt	1014.0	1.52230
nA'	768.2	1.52696
nr	706.5	1.52871
nC	656.3	1.53047
nC'	643.9	1.53096
nD	589.3	1.53348
nd	587.6	1.53358
ne	546.1	1.53603
nF	486.1	1.54081
nF'	480.0	1.54142
ng	435.8	1.54657
nG'	434.1	
nh	404.7	1.55143
ni	365.0	1.55993

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00817	0.00351	0.00311	0.00556
θ C,t	θ C,A'	θ d,C	θ e,C
0.790	0.339	0.301	0.538
ng−nd	ng−nF	nh−ng	ni−ng
0.01299	0.00576	0.00486	0.01336
θ g,d	θ g,F	θ h,g	θ i,g
1.256	0.557	0.470	1.292
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00866	0.00507	0.00539	0.01851
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.828	0.485	0.515	1.770

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300	0.04 $_0$	
310	0.35 $_0$	0.07 $_2$
320	0.70 $_1$	0.41 $_1$
330	0.87 $_8$	0.72 $_2$
340	0.94 $_7$	0.87 $_4$
350	0.97 $_8$	0.94 $_7$
360	0.99 $_1$	0.97 $_8$
370	0.99 $_5$	0.98 $_9$
380	0.99 $_5$	0.98 $_9$
390	0.99 $_5$	0.98 $_9$
400	0.99 $_5$	0.98 $_9$
420	0.99 $_5$	0.98 $_9$
440	0.99 $_5$	0.98 $_9$
460	0.99 $_5$	0.98 $_9$
480	0.99 $_7$	0.99 $_2$
500	0.99 $_7$	0.99 $_2$
550	0.99 $_7$	0.99 $_2$
600	0.99 $_8$	0.99 $_6$
650	0.99 $_8$	0.99 $_6$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_4$	0.98 $_5$
2000	0.93 $_6$	0.84 $_8$

分散式の常数 Constans of Dispersion Formula	
A0	2.3138571
A1	−9.1408348 ×10 $^{-3}$
A2	1.2749755 ×10 $^{-2}$
A3	6.0979920 ×10 $^{-4}$
A4	−4.6036549 ×10 $^{-5}$
A5	3.2022402 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0032
$\Delta\theta$ C,A'	0.0006
$\Delta\theta$ g,d	−0.0028
$\Delta\theta$ g,F	−0.0029
$\Delta\theta$ i,g	0.0019

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 429 (4)	転移点 Tg (℃) Transformation Point 444
ビッカース硬さ Hv Vickers Hardness 475	屈伏点 At (℃) Yielding Point 494
磨耗度 Ha Abrasion 110	線膨張係数 $\alpha\times10^{-7}$ Thermal Expansion (100−300℃) 106
ヤング率 E (10^8N/m^2) Young's Modulus 645	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 264	
ポアソン比 σ Poisson Ratio 0.223	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 33/30
耐酸性(粉末法) RA Acid Resistance 2	比重 S.g Specific Gravity 2.80
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

523509 Schott Type KF5	nd 1.52310	ν d 50.9	nF−nC 0.01027
	ne 1.52555	ν e 50.7	nF'−nC' 0.01037

屈折率 Refractive Indices		
nt	1014.0	1.51188
nA'	768.2	1.51652
nr	706.5	1.51826
nC	656.3	1.52001
nC'	643.9	1.52050
nD	589.3	1.52301
nd	587.6	1.52310
ne	546.1	1.52555
nF	486.1	1.53028
nF'	480.0	1.53087
ng	435.8	1.53599
nG'	434.1	
nh	404.7	1.54080
ni	365.0	1.54920

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00813	0.00349	0.00309	0.00554
θ C,t	θ C,A'	θ d,C	θ e,C
0.792	0.340	0.301	0.539
ng−nd	ng−nF	nh−ng	ni−ng
0.01289	0.00571	0.00481	0.01321
θ g,d	θ g,F	θ h,g	θ i,g
1.255	0.556	0.468	1.286
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00862	0.00505	0.00532	0.01833
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.831	0.487	0.513	1.768

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300	0.02 1	
310	0.24 1	0.02 8
320	0.64 4	0.33 3
330	0.85 3	0.67 2
340	0.93 2	0.83 8
350	0.96 4	0.91 3
360	0.97 8	0.94 7
370	0.98 2	0.95 7
380	0.98 2	0.95 7
390	0.98 8	0.97 1
400	0.99 0	0.97 5
420	0.99 0	0.97 5
440	0.99 0	0.97 5
460	0.99 1	0.97 8
480	0.99 1	0.97 8
500	0.99 4	0.98 5
550	0.99 4	0.98 5
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 5	0.98 9
1500	0.99 2	0.98 2
2000	0.92 2	0.81 7

分散式の常数 Constans of Dispersion Formula	
A0	2.2805538
A1	−8.2026321 ×10 $^{-3}$
A2	1.3809438 ×10 $^{-2}$
A3	2.3995092 ×10 $^{-4}$
A4	2.0338215 ×10 $^{-6}$
A5	7.9906252 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0078
$\Delta\theta$ C,A'	0.0017
$\Delta\theta$ g,d	−0.0054
$\Delta\theta$ g,F	−0.0050
$\Delta\theta$ i,g	−0.0091

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 469 (5)	転移点 Tg (℃) Transformation Point 429
ビッカース硬さ Hv Vickers Hardness 514	屈伏点 At (℃) Yielding Point 499
磨耗度 Ha Abrasion 100	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 84
ヤング率 E (10^{8}N/m^2) Young's Modulus 634	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 264	
ポアソン比 σ Poisson Ratio 0.200	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 33/30
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 2.72
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

517522 Schott Type	nd 1.51742	ν d 52.2	nF−nC 0.00992
KF6	ne 1.51978	ν e 51.9	nF'−nC' 0.01002

屈折率 Refractive Indices		
nt	1014.0	1.50650
nA'	768.2	1.51104
nr	706.5	1.51273
nC	656.3	1.51443
nC'	643.9	1.51490
nD	589.3	1.51733
nd	587.6	1.51742
ne	546.1	1.51978
nF	486.1	1.52435
nF'	480.0	1.52492
ng	435.8	1.52984
nG'	434.1	
nh	404.7	1.53447
ni	365.0	1.54252

分散式の常数 Constans of Dispersion Formula	
A0	2.2649653
A1	$-8.3248013 \times 10^{-3}$
A2	1.3283615×10^{-2}
A3	2.2574784×10^{-4}
A4	2.2142083×10^{-6}
A5	6.8028597×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0099
$\Delta\theta$ C,A'	0.0022
$\Delta\theta$ g,d	−0.0060
$\Delta\theta$ g,F	−0.0057
$\Delta\theta$ i,g	−0.0077

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00793	0.00339	0.00299	0.00535
θ C,t	θ C,A'	θ d,C	θ e,C
0.799	0.342	0.301	0.539
ng−nd	ng−nF	nh−ng	ni−ng
0.01242	0.00549	0.00463	0.01268
θ g,d	θ g,F	θ h,g	θ i,g
1.252	0.553	0.467	1.278
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00840	0.00488	0.00514	0.01760
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.838	0.487	0.513	1.756

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 472 (5)	転移点 Tg (℃) Transformation Point 417
ビッカース硬さ Hv Vickers Hardness 470	屈伏点 At (℃) Yielding Point 482
磨耗度 Ha Abrasion 110	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 102
ヤング率 E (10^8N/m^2) Young's Modulus 622	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 258	
ポアソン比 σ Poisson Ratio 0.207	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 33/30
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 2.66
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300	0.02 4	
310	0.42 5	0.11 8
320	0.75 8	0.50 0
330	0.91 5	0.80 1
340	0.96 5	0.91 6
350	0.98 5	0.96 4
360	0.99 0	0.97 5
370	0.99 4	0.98 5
380	0.99 5	0.98 9
390	0.99 7	0.99 2
400	0.99 7	0.99 2
420	0.99 7	0.99 2
440	0.99 7	0.99 2
460	0.99 7	0.99 2
480	0.99 7	0.99 2
500	0.99 7	0.99 2
550	0.99 7	0.99 2
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.94 3	0.86 4

559539	nd 1.55920	ν d 53.9	nF−nC 0.01038
K-BPG2	ne 1.56166	ν e 53.6	nF'−nC' 0.01047

屈折率 Refractive Indices

nt	1014.0	1.54777
nA'	768.2	1.55251
nr	706.5	1.55429
nC	656.3	1.55606
nC'	643.9	1.55656
nD	589.3	1.55910
nd	587.6	1.55920
ne	546.1	1.56166
nF	486.1	1.56644
nF'	480.0	1.56703
ng	435.8	1.57215
nG'	434.1	
nh	404.7	1.57696
ni	365.0	1.58525

分散式の常数 Constans of Dispersion Formula

A0	2.3902603
A1	$-8.7371459 \times 10^{-3}$
A2	1.4541638×10^{-2}
A3	1.6879648×10^{-4}
A4	1.3006747×10^{-5}
A5	$-7.1838473 \times 10^{-8}$

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0011
$\Delta\theta$ C,A'	0.0005
$\Delta\theta$ g,d	−0.0070
$\Delta\theta$ g,F	−0.0065
$\Delta\theta$ i,g	−0.0106

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.00829	0.00355	0.00314	0.00560
θ C,t	θ C,A'	θ d,C	θ e,C
0.799	0.342	0.303	0.539
ng−nd	ng−nF	nh−ng	ni−ng
0.01295	0.00571	0.00481	0.01310
θ g,d	θ g,F	θ h,g	θ i,g
1.248	0.550	0.463	1.262
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00879	0.00510	0.00537	0.01822
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.840	0.487	0.513	1.740

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 573 (6)	転移点 Tg (℃) Transformation Point 589
ビッカース硬さ Hv Vickers Hardness 562	屈伏点 At (℃) Yielding Point 651
磨耗度 Ha Abrasion 90	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 74
ヤング率 E (10^8N/m^2) Young's Modulus 799	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 323	
ポアソン比 σ Poisson Ratio 0.238	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 37/33
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 2.72
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.01 3	
340	0.22 3	0.02 3
350	0.54 0	0.21 4
360	0.76 2	0.50 7
370	0.87 3	0.71 4
380	0.92 9	0.83 2
390	0.95 7	0.89 6
400	0.97 1	0.93 0
420	0.98 0	0.95 0
440	0.98 2	0.95 7
460	0.98 5	0.96 4
480	0.98 8	0.97 1
500	0.98 8	0.97 1
550	0.99 1	0.97 8
600	0.99 2	0.98 2
650	0.99 2	0.98 2
700	0.99 5	0.98 9
800	0.99 5	0.98 9
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.98 2	0.95 7

589532 Schott Type	nd 1.58904	ν d 53.2	nF−nC 0.01108
BaLF6	ne 1.59168	ν e 52.9	nF'−nC' 0.01119

屈折率 Refractive Indices

nt	1014.0	1.57694
nA'	768.2	1.58194
nr	706.5	1.58382
nC	656.3	1.58570
nC'	643.9	1.58623
nD	589.3	1.58894
nd	587.6	1.58904
ne	546.1	1.59168
nF	486.1	1.59678
nF'	480.0	1.59742
ng	435.8	1.60292
nG'	434.1	
nh	404.7	1.60807
ni	365.0	1.61697

分散式の常数 Constans of Dispersion Formula

A0	2.4811792
A1	$-9.3663791 \times 10^{-3}$
A2	1.5294930×10^{-2}
A3	3.3395127×10^{-4}
A4	$-1.8459216 \times 10^{-6}$
A5	5.7756517×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	−0.0036
$\Delta\theta$ C,A'	−0.0013
$\Delta\theta$ g,d	−0.0033
$\Delta\theta$ g,F	−0.0035
$\Delta\theta$ i,g	−0.0101

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.00876	0.00376	0.00334	0.00598
θ C,t	θ C,A'	θ d,C	θ e,C
0.791	0.339	0.301	0.540
ng−nd	ng−nF	nh−ng	ni−ng
0.01388	0.00614	0.00515	0.01405
θ g,d	θ g,F	θ h,g	θ i,g
1.253	0.554	0.465	1.268
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00929	0.00545	0.00574	0.01955
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.830	0.487	0.513	1.747

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	556 (6)
ビッカース硬さ Hv Vickers Hardness	566
磨耗度 Ha Abrasion	140
ヤング率 E (10^8N/m^2) Young's Modulus	778
剛性率 G (10^8N/m^2) Modulus of Rigidity	311
ポアソン比 σ Poisson Ratio	0.251

化学的性質 Chemical Properties

耐水性(粉末法) RW Water Resistance	1
耐酸性(粉末法) RA Acid Resistance	2
耐候性(表面法) DW Weather Resistance	1

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	563
屈伏点 At (℃) Yielding Point	608
線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	79
備考 Remark s	

その他 Other Properties

泡 B Bubbles	
着色度 C Color Degree	34/31
比重 S.g Specific Gravity	3.30
脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310	0.06 7	
320	0.43 5	0.12 5
330	0.76 3	0.50 9
340	0.89 7	0.76 2
350	0.95 3	0.88 7
360	0.97 5	0.94 0
370	0.98 7	0.96 8
380	0.99 2	0.98 2
390	0.99 5	0.98 9
400	0.99 7	0.99 2
420	0.99 8	0.99 6
440	0.99 8	0.99 6
460	0.99 8	0.99 6
480	0.99 8	0.99 6
500	0.99 8	0.99 6
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 5	0.98 9
1500	0.98 8	0.97 1
2000	0.96 0	0.90 3

617540 Schott Type	nd 1.61720	ν d 54.0	nF−nC 0.01142
SSK1	ne 1.61992	ν e 53.8	nF'−nC' 0.01153

屈折率 Refractive Indices		
nt	1014.0	1.60476
nA'	768.2	1.60987
nr	706.5	1.61181
nC	656.3	1.61375
nC'	643.9	1.61430
nD	589.3	1.61710
nd	587.6	1.61720
ne	546.1	1.61992
nF	486.1	1.62517
nF'	480.0	1.62583
ng	435.8	1.63148
nG'	434.1	
nh	404.7	1.63676
ni	365.0	1.64583

分散式の常数 Constans of Dispersion Formula	
A0	2.5672240
A1	$-8.5830688 \times 10^{-3}$
A2	1.7273276×10^{-2}
A3	2.0972565×10^{-5}
A4	4.0081193×10^{-5}
A5	$-1.6060313 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0111
$\Delta\theta$ C,A'	−0.0019
$\Delta\theta$ g,d	−0.0038
$\Delta\theta$ g,F	−0.0038
$\Delta\theta$ i,g	−0.0147

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00899	0.00388	0.00345	0.00617
θ C,t	θ C,A'	θ d,C	θ e,C
0.787	0.340	0.302	0.540
ng−nd	ng−nF	nh−ng	ni−ng
0.01428	0.00631	0.00528	0.01435
θ g,d	θ g,F	θ h,g	θ i,g
1.250	0.553	0.462	1.257
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00954	0.00562	0.00591	0.02000
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.827	0.487	0.513	1.735

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 480 (5)	転移点 Tg (℃) Transformation Point 651
ビッカース硬さ Hv Vickers Hardness 475	屈伏点 At (℃) Yielding Point 696
磨耗度 Ha Abrasion 140	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 72
ヤング率 E (10^8N/m^2) Young's Modulus 699	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 281	
ポアソン比 σ Poisson Ratio 0.247	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 35/32
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.63
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.15 4	
330	0.52 8	0.20 3
340	0.77 2	0.52 5
350	0.88 0	0.72 8
360	0.93 6	0.84 8
370	0.96 1	0.90 6
380	0.96 8	0.92 3
390	0.97 5	0.94 0
400	0.98 1	0.95 4
420	0.98 2	0.95 7
440	0.98 5	0.96 4
460	0.98 8	0.97 1
480	0.99 0	0.97 5
500	0.99 1	0.97 8
550	0.99 5	0.98 9
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 7	0.99 2
1500	0.99 8	0.99 6
2000	0.98 5	0.96 4

622531 Schott Type	nd 1.62230	ν d 53.1	nF−nC 0.01171
SSK2	ne 1.62509	ν e 52.8	nF'−nC' 0.01183

屈折率 Refractive Indices		
nt	1014.0	1.60960
nA'	768.2	1.61481
nr	706.5	1.61679
nC	656.3	1.61877
nC'	643.9	1.61933
nD	589.3	1.62219
nd	587.6	1.62230
ne	546.1	1.62509
nF	486.1	1.63048
nF'	480.0	1.63116
ng	435.8	1.63697
nG'	434.1	
nh	404.7	1.64241
ni	365.0	1.65181

分散式の常数 Constans of Dispersion Formula	
A0	2.5838727
A1	$-9.3374301 \times 10^{-3}$
A2	1.6662365×10^{-2}
A3	3.5690825×10^{-4}
A4	$-4.7300773 \times 10^{-6}$
A5	8.4542327×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0110
$\Delta\theta$ C,A'	−0.0025
$\Delta\theta$ g,d	−0.0033
$\Delta\theta$ g,F	−0.0034
$\Delta\theta$ i,g	−0.0110

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00917	0.00396	0.00353	0.00632
θ C,t	θ C,A'	θ d,C	θ e,C
0.783	0.338	0.301	0.540
ng−nd	ng−nF	nh−ng	ni−ng
0.01467	0.00649	0.00544	0.01484
θ g,d	θ g,F	θ h,g	θ i,g
1.253	0.554	0.465	1.267
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00973	0.00576	0.00607	0.02065
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.822	0.487	0.513	1.746

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 514 (5)	転移点 Tg (℃) Transformation Point 645
ビッカース硬さ Hv Vickers Hardness 513	屈伏点 At (℃) Yielding Point 687
磨耗度 Ha Abrasion 140	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 72
ヤング率 E (10^8N/m^2) Young's Modulus 769	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 308	
ポアソン比 σ Poisson Ratio 0.249	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 35/32
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.67
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.10 0	
330	0.45 9	0.14 2
340	0.74 6	0.48 1
350	0.88 3	0.73 3
360	0.94 3	0.86 4
370	0.97 1	0.93 0
380	0.97 7	0.94 4
390	0.98 2	0.95 7
400	0.98 8	0.97 1
420	0.99 0	0.97 5
440	0.99 0	0.97 5
460	0.99 0	0.97 5
480	0.99 2	0.98 2
500	0.99 2	0.98 2
550	0.99 5	0.98 9
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 4	0.98 5
1500	0.98 2	0.95 7
2000	0.96 0	0.90 3

615511 Schott Type	nd 1.61484	ν d 51.1	nF−nC 0.01203
SSK3	ne 1.61770	ν e 50.8	nF'−nC' 0.01216

屈折率 Refractive Indices		
nt	1014.0	1.60191
nA'	768.2	1.60718
nr	706.5	1.60920
nC	656.3	1.61123
nC'	643.9	1.61180
nD	589.3	1.61473
nd	587.6	1.61484
ne	546.1	1.61770
nF	486.1	1.62326
nF'	480.0	1.62396
ng	435.8	1.62996
nG'	434.1	
nh	404.7	1.63561
ni	365.0	1.64542

分散式の常数 Constans of Dispersion Formula	
A0	2.5588884
A1	$-9.1978199 \times 10^{-3}$
A2	1.6728381×10^{-2}
A3	4.4960809×10^{-4}
A4	$-1.4061349 \times 10^{-5}$
A5	1.5148864×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0099
$\Delta\theta$ C,A'	−0.0016
$\Delta\theta$ g,d	−0.0033
$\Delta\theta$ g,F	−0.0038
$\Delta\theta$ i,g	−0.0089

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00932	0.00405	0.00361	0.00647
θ C,t	θ C,A'	θ d,C	θ e,C
0.775	0.337	0.300	0.538
ng−nd	ng−nF	nh−ng	ni−ng
0.01512	0.00670	0.00565	0.01546
θ g,d	θ g,F	θ h,g	θ i,g
1.257	0.557	0.470	1.285
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00989	0.00590	0.00626	0.02146
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.813	0.485	0.515	1.765

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 470 (5)	転移点 Tg (℃) Transformation Point 627
ビッカース硬さ Hv Vickers Hardness 461	屈伏点 At (℃) Yielding Point 682
磨耗度 Ha Abrasion 150	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 76
ヤング率 E (10^8N/m^2) Young's Modulus 733	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 295	
ポアソン比 σ Poisson Ratio 0.260	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 35/32
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 3.61
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.05 0	
330	0.32 0	0.06 2
340	0.68 8	0.39 3
350	0.86 0	0.68 6
360	0.92 6	0.82 6
370	0.95 7	0.89 6
380	0.97 1	0.93 0
390	0.98 0	0.95 0
400	0.98 2	0.95 7
420	0.98 5	0.96 4
440	0.98 5	0.96 4
460	0.98 8	0.97 1
480	0.99 0	0.97 5
500	0.99 0	0.97 5
550	0.99 2	0.98 2
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.99 5	0.98 9

618551 Schott Type SSK4	nd 1.61765	ν d 55.1	nF−nC 0.01121
	ne 1.62032	ν e 54.8	nF'−nC' 0.01132

屈折率 Refractive Indices		
nt	1014.0	1.60538
nA'	768.2	1.61043
nr	706.5	1.61235
nC	656.3	1.61426
nC'	643.9	1.61480
nD	589.3	1.61755
nd	587.6	1.61765
ne	546.1	1.62032
nF	486.1	1.62547
nF'	480.0	1.62612
ng	435.8	1.63164
nG'	434.1	
nh	404.7	1.63681
ni	365.0	1.64557

分散式の常数 Constans of Dispersion Formula	
A0	2.5682232
A1	$-8.0686132 \times 10^{-3}$
A2	1.8062698×10^{-2}
A3	$-3.5372055 \times 10^{-4}$
A4	9.6878774×10^{-5}
A5	$-4.9968865 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0111
$\Delta\theta$ C,A'	−0.0012
$\Delta\theta$ g,d	−0.0042
$\Delta\theta$ g,F	−0.0044
$\Delta\theta$ i,g	−0.0206

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00888	0.00383	0.00339	0.00606
θ C,t	θ C,A'	θ d,C	θ e,C
0.792	0.342	0.302	0.541
ng−nd	ng−nF	nh−ng	ni−ng
0.01399	0.00617	0.00517	0.01393
θ g,d	θ g,F	θ h,g	θ i,g
1.248	0.550	0.461	1.242
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00942	0.00552	0.00580	0.01945
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.832	0.488	0.512	1.718

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 510 (5)	転移点 Tg (℃) Transformation Point 653
ビッカース硬さ Hv Vickers Hardness 509	屈伏点 At (℃) Yielding Point 690
磨耗度 Ha Abrasion 140	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 73
ヤング率 E (10^8N/m^2) Young's Modulus 703	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 271	
ポアソン比 σ Poisson Ratio 0.296	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 35/31
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.63
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.04 0	
320	0.32 9	0.06 2
330	0.66 3	0.35 7
340	0.81 9	0.60 8
350	0.91 1	0.79 2
360	0.95 1	0.88 3
370	0.96 8	0.92 3
380	0.97 5	0.94 0
390	0.98 1	0.95 4
400	0.98 5	0.96 4
420	0.98 5	0.96 4
440	0.98 8	0.97 1
460	0.98 8	0.97 1
480	0.99 1	0.97 8
500	0.99 2	0.98 2
550	0.99 5	0.98 9
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 2	0.98 2
1500	0.99 0	0.97 5
2000	0.96 5	0.91 6

658508 Schott Type	nd 1.65844	ν d 50.8	nF−nC 0.01295
SSK5	ne 1.66152	ν e 50.6	nF'−nC' 0.01308

屈折率 Refractive Indices		
nt	1014.0	1.64457
nA'	768.2	1.65020
nr	706.5	1.65237
nC	656.3	1.65455
nC'	643.9	1.65517
nD	589.3	1.65833
nd	587.6	1.65844
ne	546.1	1.66152
nF	486.1	1.66750
nF'	480.0	1.66825
ng	435.8	1.67472
nG'	434.1	
nh	404.7	1.68081
ni	365.0	1.69132

分散式の常数 Constans of Dispersion Formula	
A0	2.6934535
A1	$-8.4849650 \times 10^{-3}$
A2	2.0495930×10^{-2}
A3	$-1.2599938 \times 10^{-4}$
A4	7.4383750×10^{-5}
A5	$-3.1333041 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0127
$\Delta\theta$ C,A'	−0.0021
$\Delta\theta$ g,d	−0.0035
$\Delta\theta$ g,F	−0.0036
$\Delta\theta$ i,g	−0.0142

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00998	0.00435	0.00389	0.00697
θ C,t	θ C,A'	θ d,C	θ e,C
0.771	0.336	0.300	0.538
ng−nd	ng−nF	nh−ng	ni−ng
0.01628	0.00722	0.00609	0.01660
θ g,d	θ g,F	θ h,g	θ i,g
1.257	0.558	0.470	1.282
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01060	0.00635	0.00673	0.02307
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.810	0.485	0.515	1.764

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 521 (5)	転移点 Tg (℃) Transformation Point 634
ビッカース硬さ Hv Vickers Hardness 517	屈伏点 At (℃) Yielding Point 672
磨耗度 Ha Abrasion 180	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 86
ヤング率 E (10^8N/m^2) Young's Modulus 817	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 319	
ポアソン比 σ Poisson Ratio 0.280	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 36/32
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.87
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.03 0	
330	0.22 3	0.02 3
340	0.58 2	0.25 8
350	0.79 9	0.57 1
360	0.89 8	0.76 5
370	0.94 7	0.87 4
380	0.96 5	0.91 6
390	0.97 5	0.94 0
400	0.98 0	0.95 0
420	0.98 2	0.95 7
440	0.98 5	0.96 4
460	0.98 5	0.96 4
480	0.98 8	0.97 1
500	0.99 0	0.97 5
550	0.99 2	0.98 2
600	0.99 4	0.98 5
650	0.99 4	0.98 5
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 7	0.99 2
1500	0.99 4	0.98 5
2000	0.97 1	0.93 0

620498 Schott Type K-SSK9	nd 1.62012	ν d 49.8	nF-nC 0.01245
	ne 1.62308	ν e 49.5	nF'-nC' 0.01258

屈折率 Refractive Indices		
nt	1014.0	1.60676
nA'	768.2	1.61221
nr	706.5	1.61429
nC	656.3	1.61639
nC'	643.9	1.61698
nD	589.3	1.62001
nd	587.6	1.62012
ne	546.1	1.62308
nF	486.1	1.62884
nF'	480.0	1.62956
ng	435.8	1.63581
nG'	434.1	
nh	404.7	1.64172
ni	365.0	1.65206

分散式の常数 Constans of Dispersion Formula	
A0	2.5732241
A1	$-9.0800144 \times 10^{-3}$
A2	1.8042766×10^{-2}
A3	2.3686473×10^{-4}
A4	1.7598292×10^{-5}
A5	3.4172910×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0051
$\Delta\theta$ C,A'	−0.0010
$\Delta\theta$ g,d	−0.0025
$\Delta\theta$ g,F	−0.0028
$\Delta\theta$ i,g	0.0011

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.00963	0.00418	0.00373	0.00669
θ C,t	θ C,A'	θ d,C	θ e,C
0.773	0.336	0.300	0.537
ng-nd	ng-nF	nh-ng	ni-ng
0.01569	0.00697	0.00591	0.01625
θ g,d	θ g,F	θ h,g	θ i,g
1.260	0.560	0.475	1.305
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.01022	0.00610	0.00648	0.02250
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.812	0.485	0.515	1.789

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 578 (6)	転移点 Tg (℃) Transformation Point 579
ビッカース硬さ Hv Vickers Hardness 620	屈伏点 At (℃) Yielding Point 626
磨耗度 Ha Abrasion 180	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 98
ヤング率 E (10^8N/m^2) Young's Modulus 818	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 330	
ポアソン比 σ Poisson Ratio 0.240	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 2	着色度 C Color Degree 38/34
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 3.29
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.04 2	
350	0.32 9	0.06 2
360	0.65 0	0.34 1
370	0.83 3	0.63 3
380	0.90 8	0.78 6
390	0.94 3	0.86 4
400	0.96 5	0.91 6
420	0.98 1	0.95 4
440	0.98 5	0.96 4
460	0.98 8	0.97 1
480	0.99 0	0.97 5
500	0.99 1	0.97 8
550	0.99 4	0.98 5
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.98 1	0.95 4

649530 Schott Type	nd 1.64850	ν d 53.0	nF−nC 0.01224
SSKn1	ne 1.65142	ν e 52.7	nF'−nC' 0.01236

屈折率 Refractive Indices		
nt	1014.0	1.63521
nA'	768.2	1.64066
nr	706.5	1.64274
nC	656.3	1.64482
nC'	643.9	1.64540
nD	589.3	1.64840
nd	587.6	1.64850
ne	546.1	1.65142
nF	486.1	1.65706
nF'	480.0	1.65776
ng	435.8	1.66383
nG'	434.1	
nh	404.7	1.66954
ni	365.0	1.67938

分散式の常数 Constans of Dispersion Formula	
A0	2.6654478
A1	$-9.4566671 \times 10^{-3}$
A2	1.8571017×10^{-2}
A3	9.9978444×10^{-5}
A4	3.3877062×10^{-5}
A5	$-1.0113180 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0082
$\Delta\theta$ C,A'	−0.0006
$\Delta\theta$ g,d	−0.0039
$\Delta\theta$ g,F	−0.0048
$\Delta\theta$ i,g	−0.0091

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00961	0.00416	0.00368	0.00660
θ C,t	θ C,A'	θ d,C	θ e,C
0.785	0.340	0.301	0.539
ng−nd	ng−nF	nh−ng	ni−ng
0.01533	0.00677	0.00571	0.01555
θ g,d	θ g,F	θ h,g	θ i,g
1.252	0.553	0.467	1.270
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01019	0.00602	0.00634	0.02162
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.824	0.487	0.513	1.749

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	498 (5)	転移点 Tg (℃) Transformation Point	638
ビッカース硬さ Hv Vickers Hardness	539	屈伏点 At (℃) Yielding Point	682
磨耗度 Ha Abrasion	170	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	83
ヤング率 E (10^8N/m^2) Young's Modulus	839	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	328		
ポアソン比 σ Poisson Ratio	0.277	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	38/33
耐酸性(粉末法) RA Acid Resistance	4	比重 S.g Specific Gravity	3.80
耐候性(表面法) DW Weather Resistance	2	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.05 0	
340	0.20 0	0.01 8
350	0.49 3	0.17 1
360	0.71 4	0.43 0
370	0.83 9	0.64 6
380	0.90 7	0.78 3
390	0.94 3	0.86 4
400	0.95 7	0.89 6
420	0.97 4	0.93 7
440	0.97 8	0.94 7
460	0.98 2	0.95 7
480	0.98 5	0.96 4
500	0.98 5	0.96 4
550	0.99 0	0.97 5
600	0.99 0	0.97 5
650	0.99 4	0.98 5
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.99 5	0.98 9

548459 Schott Type LLF1	nd 1.54814	νd 45.9	nF−nC 0.01195
	ne 1.55098	νe 45.6	nF'−nC' 0.01208

屈折率 Refractive Indices		
nt	1014.0	1.53545
nA'	768.2	1.54060
nr	706.5	1.54258
nC	656.3	1.54457
nC'	643.9	1.54514
nD	589.3	1.54804
nd	587.6	1.54814
ne	546.1	1.55098
nF	486.1	1.55652
nF'	480.0	1.55722
ng	435.8	1.56328
nG'	434.1	
nh	404.7	1.56905
ni	365.0	1.57922

分散式の常数 Constans of Dispersion Formula	
A0	2.3494895
A1	−7.9027067 ×10 $^{-3}$
A2	1.6497587 ×10 $^{-2}$
A3	1.8108174 ×10 $^{-4}$
A4	2.7888821 ×10 $^{-5}$
A5	−9.9314145 ×10 $^{-8}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0030
Δθ C,A'	
Δθ g,d	−0.0036
Δθ g,F	−0.0028
Δθ i,g	−0.0008

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00912	0.00397	0.00357	0.00641
θ C,t	θ C,A'	θ d,C	θ e,C
0.763	0.332	0.299	0.536
ng−nd	ng−nF	nh−ng	ni−ng
0.01514	0.00676	0.00577	0.01594
θ g,d	θ g,F	θ h,g	θ i,g
1.267	0.566	0.483	1.334
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00969	0.00584	0.00624	0.02200
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.802	0.483	0.517	1.821

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 453 (5)	転移点 Tg (℃) Transformation Point 433
ビッカース硬さ Hv Vickers Hardness 463	屈伏点 At (℃) Yielding Point 480
磨耗度 Ha Abrasion 130	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 100
ヤング率 E (10^{8}N/m^2) Young's Modulus 599	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 247	
ポアソン比 σ Poisson Ratio 0.214	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 34/31
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 2.93
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.04 $_8$	
320	0.44 $_7$	0.13 $_4$
330	0.77 $_9$	0.53 $_6$
340	0.91 $_2$	0.79 $_5$
350	0.96 $_7$	0.92 $_0$
360	0.98 $_5$	0.96 $_4$
370	0.98 $_8$	0.97 $_1$
380	0.98 $_8$	0.97 $_1$
390	0.99 $_5$	0.98 $_9$
400	0.99 $_7$	0.99 $_2$
420	0.99 $_7$	0.99 $_2$
440	0.99 $_7$	0.99 $_2$
460	0.99 $_7$	0.99 $_2$
480	0.99 $_7$	0.99 $_2$
500	0.99 $_8$	0.99 $_6$
550	0.99 $_8$	0.99 $_6$
600	0.99 $_8$	0.99 $_6$
650	0.99 $_8$	0.99 $_6$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_8$	0.99 $_6$
2000	0.93 $_4$	0.84 $_5$

541472 Schott Type LLF2	nd 1.54072	ν d 47.2	nF−nC 0.01145
	ne 1.54344	ν e 47.0	nF'−nC' 0.01157

屈折率 Refractive Indices		
nt	1014.0	1.52842
nA'	768.2	1.53346
nr	706.5	1.53537
nC	656.3	1.53730
nC'	643.9	1.53784
nD	589.3	1.54062
nd	587.6	1.54072
ne	546.1	1.54344
nF	486.1	1.54875
nF'	480.0	1.54941
ng	435.8	1.55519
nG'	434.1	
nh	404.7	1.56067
ni	365.0	1.57032

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00888	0.00384	0.00342	0.00614
θ C,t	θ C,A'	θ d,C	θ e,C
0.776	0.335	0.299	0.536
ng−nd	ng−nF	nh−ng	ni−ng
0.01447	0.00644	0.00548	0.01513
θ g,d	θ g,F	θ h,g	θ i,g
1.264	0.562	0.479	1.321
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00942	0.00560	0.00597	0.02091
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.814	0.484	0.516	1.807

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.19 6	0.01 7
320	0.66 3	0.35 7
330	0.88 4	0.73 6
340	0.95 3	0.88 7
350	0.98 5	0.96 4
360	0.98 8	0.97 1
370	0.99 4	0.98 5
380	0.99 5	0.98 9
390	0.99 7	0.99 2
400	0.99 7	0.99 2
420	0.99 7	0.99 2
440	0.99 7	0.99 2
460	0.99 7	0.99 2
480	0.99 7	0.99 2
500	0.99 7	0.99 2
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 5	0.98 9
2000	0.94 3	0.86 4

分散式の常数 Constans of Dispersion Formula	
A0	2.3303451
A1	$-8.8935015 \times 10^{-3}$
A2	1.4877806×10^{-2}
A3	4.2669633×10^{-4}
A4	$-1.0088430 \times 10^{-5}$
A5	1.6726442×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0090
$\Delta\theta$ C,A'	0.0016
$\Delta\theta$ g,d	−0.0041
$\Delta\theta$ g,F	−0.0040
$\Delta\theta$ i,g	−0.0028

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 459 (5)	転移点 Tg (℃) Transformation Point 441
ビッカース硬さ Hv Vickers Hardness 458	屈伏点 At (℃) Yielding Point 494
磨耗度 Ha Abrasion 120	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 93
ヤング率 E (10^8N/m^2) Young's Modulus 608	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 252	
ポアソン比 σ Poisson Ratio 0.207	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 33/31
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 2.87
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

532489 Schott Type LLF6	nd 1.53172	νd 48.9	nF−nC 0.01088
	ne 1.53431	νe 48.6	nF'−nC' 0.01100

屈折率 Refractive Indices		
nt	1014.0	1.52000
nA'	768.2	1.52479
nr	706.5	1.52662
nC	656.3	1.52846
nC'	643.9	1.52897
nD	589.3	1.53163
nd	587.6	1.53172
ne	546.1	1.53431
nF	486.1	1.53934
nF'	480.0	1.53997
ng	435.8	1.54543
nG'	434.1	
nh	404.7	1.55060
ni	365.0	1.55959

分散式の常数 Constans of Dispersion Formula	
A0	2.3027021
A1	−7.3110904 ×10 $^{-3}$
A2	1.5656462 ×10 $^{-2}$
A3	−6.4404698 ×10 $^{-5}$
A4	5.4437505 ×10 $^{-5}$
A5	−1.9865438 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0034
Δθ C,A'	0.0016
Δθ g,d	−0.0045
Δθ g,F	−0.0043
Δθ i,g	−0.0099

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00846	0.00367	0.00326	0.00585
θ C,t	θ C,A'	θ d,C	θ e,C
0.778	0.337	0.300	0.538
ng−nd	ng−nF	nh−ng	ni−ng
0.01371	0.00609	0.00517	0.01416
θ g,d	θ g,F	θ h,g	θ i,g
1.260	0.560	0.475	1.301
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00897	0.00534	0.00566	0.01962
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.815	0.485	0.515	1.784

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 387 (4)	転移点 Tg (℃) Transformation Point 437
ビッカース硬さ Hv Vickers Hardness 401	屈伏点 At (℃) Yielding Point 483
磨耗度 Ha Abrasion 110	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 101
ヤング率 E (10^{8}N/m^2) Young's Modulus 628	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 259	
ポアソン比 σ Poisson Ratio 0.212	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 2	着色度 C Color Degree 33/31
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 2.78
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.04 $_2$	
320	0.60 $_0$	0.27 $_9$
330	0.83 $_3$	0.63 $_3$
340	0.93 $_3$	0.84 $_2$
350	0.97 $_1$	0.93 $_0$
360	0.98 $_5$	0.96 $_4$
370	0.98 $_8$	0.97 $_1$
380	0.98 $_8$	0.97 $_1$
390	0.99 $_5$	0.98 $_9$
400	0.99 $_5$	0.98 $_9$
420	0.99 $_2$	0.98 $_2$
440	0.99 $_2$	0.98 $_2$
460	0.99 $_2$	0.98 $_2$
480	0.99 $_5$	0.98 $_9$
500	0.99 $_5$	0.98 $_9$
550	0.99 $_7$	0.99 $_2$
600	0.99 $_7$	0.99 $_2$
650	0.99 $_7$	0.99 $_2$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_8$	0.99 $_6$
2000	0.94 $_6$	0.87 $_0$

549454 Schott Type LLF7	nd 1.54869	νd 45.4	nF−nC 0.01208
	ne 1.55156	νe 45.2	nF'−nC' 0.01221

屈折率 Refractive Indices		
nt	1014.0	1.53588
nA'	768.2	1.54107
nr	706.5	1.54307
nC	656.3	1.54509
nC'	643.9	1.54566
nD	589.3	1.54859
nd	587.6	1.54869
ne	546.1	1.55156
nF	486.1	1.55717
nF'	480.0	1.55787
ng	435.8	1.56400
nG'	434.1	
nh	404.7	1.56982
ni	365.0	1.58008

分散式の常数 Constans of Dispersion Formula	
A0	2.3513240
A1	−8.2345442 ×10 $^{-3}$
A2	1.6184681 ×10 $^{-2}$
A3	3.3894613 ×10 $^{-4}$
A4	7.3313525 ×10 $^{-6}$
A5	8.6922344 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0043
Δθ C,A'	0.0011
Δθ g,d	−0.0041
Δθ g,F	−0.0038
Δθ i,g	−0.0070

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00921	0.00402	0.00360	0.00647
θ C,t	θ C,A'	θ d,C	θ e,C
0.762	0.333	0.298	0.536
ng−nd	ng−nF	nh−ng	ni−ng
0.01531	0.00683	0.00582	0.01608
θ g,d	θ g,F	θ h,g	θ i,g
1.267	0.565	0.482	1.331
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00978	0.00590	0.00631	0.02221
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.801	0.483	0.517	1.819

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 469 (5)	転移点 Tg (℃) Transformation Point 416
ビッカース硬さ Hv Vickers Hardness 473	屈伏点 At (℃) Yielding Point 476
磨耗度 Ha Abrasion 120	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 95
ヤング率 E (10^{8}N/m^2) Young's Modulus 623	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 257	
ポアソン比 σ Poisson Ratio 0.211	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 34/31
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 2.97
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.11 $_4$	
320	0.54 $_0$	0.21 $_4$
330	0.80 $_6$	0.58 $_3$
340	0.90 $_9$	0.78 $_9$
350	0.95 $_7$	0.89 $_6$
360	0.97 $_1$	0.93 $_0$
370	0.98 $_0$	0.95 $_0$
380	0.98 $_2$	0.95 $_7$
390	0.98 $_8$	0.97 $_1$
400	0.98 $_8$	0.97 $_1$
420	0.98 $_8$	0.97 $_1$
440	0.98 $_8$	0.97 $_1$
460	0.99 $_0$	0.97 $_5$
480	0.99 $_1$	0.97 $_8$
500	0.99 $_1$	0.97 $_8$
550	0.99 $_1$	0.97 $_8$
600	0.99 $_2$	0.98 $_2$
650	0.99 $_4$	0.98 $_5$
700	0.99 $_5$	0.98 $_9$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_2$	0.98 $_2$
2000	0.92 $_9$	0.83 $_2$

533460 Schott Type LLF8	nd 1.53256	νd 46.0	nF−nC 0.01158
	ne 1.53531	νe 45.7	nF'−nC' 0.01172

屈折率 Refractive Indices		
nt	1014.0	1.52021
nA'	768.2	1.52527
nr	706.5	1.52719
nC	656.3	1.52912
nC'	643.9	1.52966
nD	589.3	1.53246
nd	587.6	1.53256
ne	546.1	1.53531
nF	486.1	1.54070
nF'	480.0	1.54138
ng	435.8	1.54733
nG'	434.1	
nh	404.7	1.55309
ni	365.0	1.56341

分散式の常数 Constans of Dispersion Formula	
A0	2.3042425
A1	−8.4107787 ×10 $^{-3}$
A2	1.5755637 ×10 $^{-2}$
A3	8.3220729 ×10 $^{-5}$
A4	4.5033107 ×10 $^{-5}$
A5	−2.6827948 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0087
Δθ C,A'	0.0001
Δθ g,d	0.0051
Δθ g,F	0.0042
Δθ i,g	0.0549

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00891	0.00385	0.00344	0.00619
θ C,t	θ C,A'	θ d,C	θ e,C
0.769	0.332	0.297	0.535
ng−nd	ng−nF	nh−ng	ni−ng
0.01477	0.00663	0.00576	0.01608
θ g,d	θ g,F	θ h,g	θ i,g
1.275	0.573	0.497	1.389
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00945	0.00565	0.00607	0.02203
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.806	0.482	0.518	1.880

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 475 (5)	転移点 Tg (℃) Transformation Point 471
ビッカース硬さ Hv Vickers Hardness 521	屈伏点 At (℃) Yielding Point 547
磨耗度 Ha Abrasion 140	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 96
ヤング率 E (10^{8}N/m^2) Young's Modulus 599	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 241	Pbless
ポアソン比 σ Poisson Ratio 0.243	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 37/34
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 2.52
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.03 $_2$	
350	0.16 $_2$	0.01 $_0$
360	0.63 $_1$	0.31 $_7$
370	0.83 $_3$	0.63 $_3$
380	0.91 $_5$	0.80 $_1$
390	0.95 $_7$	0.89 $_6$
400	0.96 $_8$	0.92 $_3$
420	0.98 $_1$	0.95 $_4$
440	0.98 $_2$	0.95 $_7$
460	0.98 $_5$	0.96 $_4$
480	0.98 $_5$	0.96 $_4$
500	0.98 $_5$	0.96 $_4$
550	0.98 $_8$	0.97 $_1$
600	0.98 $_8$	0.97 $_1$
650	0.98 $_8$	0.97 $_1$
700	0.98 $_8$	0.97 $_1$
800	0.99 $_7$	0.99 $_2$
1060	0.99 $_8$	0.99 $_6$
1500	0.98 $_8$	0.97 $_1$
2000	0.97 $_7$	0.94 $_4$

573427 Schott Type LF1	nd 1.57309	ν d 42.7	nF−nC 0.01343
	ne 1.57628	ν e 42.4	nF'−nC' 0.01360

屈折率 Refractive Indices		
nt	1014.0	1.55910
nA'	768.2	1.56471
nr	706.5	1.56690
nC	656.3	1.56910
nC'	643.9	1.56974
nD	589.3	1.57297
nd	587.6	1.57309
ne	546.1	1.57628
nF	486.1	1.58253
nF'	480.0	1.58334
ng	435.8	1.59021
nG'	434.1	
nh	404.7	1.59681
ni	365.0	1.60854

分散式の常数 Constans of Dispersion Formula	
A0	2.4221923
A1	$-8.6802852 \times 10^{-3}$
A2	1.7432349×10^{-2}
A3	6.1972412×10^{-4}
A4	$-1.9440620 \times 10^{-5}$
A5	2.7848000×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0007
$\Delta\theta$ C,A'	−0.0017
$\Delta\theta$ g,d	−0.0022
$\Delta\theta$ g,F	−0.0014
$\Delta\theta$ i,g	0.0054

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01000	0.00439	0.00399	0.00718
θ C,t	θ C,A'	θ d,C	θ e,C
0.745	0.327	0.297	0.535
ng−nd	ng−nF	nh−ng	ni−ng
0.01712	0.00768	0.00660	0.01833
θ g,d	θ g,F	θ h,g	θ i,g
1.275	0.572	0.491	1.365
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01064	0.00654	0.00706	0.02520
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.782	0.481	0.519	1.853

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 392 (4)	転移点 Tg (℃) Transformation Point 433
ビッカース硬さ Hv Vickers Hardness 414	屈伏点 At (℃) Yielding Point 492
磨耗度 Ha Abrasion 150	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 107
ヤング率 E (10^8N/m^2) Young's Modulus 591	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 241	
ポアソン比 σ Poisson Ratio 0.226	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 34/31
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.15
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.04 0	
320	0.34 7	0.07 1
330	0.72 7	0.45 0
340	0.88 3	0.73 3
350	0.94 3	0.86 4
360	0.97 1	0.93 0
370	0.98 2	0.95 7
380	0.98 2	0.95 7
390	0.98 8	0.97 1
400	0.99 0	0.97 5
420	0.99 1	0.97 8
440	0.99 1	0.97 8
460	0.99 1	0.97 8
480	0.99 2	0.98 2
500	0.99 4	0.98 5
550	0.99 5	0.98 9
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.94 3	0.86 4

589410 Schott Type LF2	nd 1.58921	ν d 41.0	nF−nC 0.01438
	ne 1.59262	ν e 40.7	nF'−nC' 0.01457

屈折率 Refractive Indices		
nt	1014.0	1.57434
nA'	768.2	1.58026
nr	706.5	1.58259
nC	656.3	1.58496
nC'	643.9	1.58562
nD	589.3	1.58908
nd	587.6	1.58921
ne	546.1	1.59262
nF	486.1	1.59934
nF'	480.0	1.60019
ng	435.8	1.60760
nG'	434.1	
nh	404.7	1.61471
ni	365.0	1.62737

分散式の常数 Constans of Dispersion Formula	
A0	2.4678624
A1	$-8.4300249 \times 10^{-3}$
A2	1.9414393×10^{-2}
A3	4.8493866×10^{-4}
A4	9.3867722×10^{-6}
A5	1.4474072×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0012
$\Delta\theta$ C,A'	0.0003
$\Delta\theta$ g,d	−0.0015
$\Delta\theta$ g,F	−0.0014
$\Delta\theta$ i,g	0.0022

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01062	0.00470	0.00425	0.00766
θ C,t	θ C,A'	θ d,C	θ e,C
0.739	0.327	0.296	0.533
ng−nd	ng−nF	nh−ng	ni−ng
0.01839	0.00826	0.00711	0.01977
θ g,d	θ g,F	θ h,g	θ i,g
1.279	0.574	0.494	1.375
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01128	0.00700	0.00757	0.02718
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.774	0.480	0.520	1.865

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 469 (5)	転移点 Tg (℃) Transformation Point 444
ビッカース硬さ Hv Vickers Hardness 478	屈伏点 At (℃) Yielding Point 495
磨耗度 Ha Abrasion 150	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 104
ヤング率 E (10^8N/m^2) Young's Modulus 606	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 247	
ポアソン比 σ Poisson Ratio 0.224	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 35/32
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.29
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.08 2	
330	0.45 9	0.14 2
340	0.73 6	0.46 4
350	0.86 7	0.70 0
360	0.93 3	0.84 2
370	0.96 1	0.90 6
380	0.96 8	0.92 3
390	0.98 2	0.95 7
400	0.98 8	0.97 1
420	0.98 8	0.97 1
440	0.98 8	0.97 1
460	0.99 0	0.97 5
480	0.99 0	0.97 5
500	0.99 1	0.97 8
550	0.99 4	0.98 5
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 7	0.99 2
1500	0.99 2	0.98 2
2000	0.92 3	0.82 0

582420 Schott Type	nd 1.58215	ν d 42.0	nF−nC 0.01385
LF3	ne 1.58544	ν e 41.8	nF'−nC' 0.01402

屈折率 Refractive Indices

nt	1014.0	1.56770
nA'	768.2	1.57349
nr	706.5	1.57575
nC	656.3	1.57804
nC'	643.9	1.57869
nD	589.3	1.58203
nd	587.6	1.58215
ne	546.1	1.58544
nF	486.1	1.59189
nF'	480.0	1.59271
ng	435.8	1.59982
nG'	434.1	
nh	404.7	1.60663
ni	365.0	1.61879

分散式の常数 Constans of Dispersion Formula

A0	2.4475694
A1	$-8.4479251 \times 10^{-3}$
A2	1.8926282×10^{-2}
A3	4.0355550×10^{-4}
A4	9.0852340×10^{-6}
A5	1.7052596×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0043
$\Delta\theta$ C,A'	0.0007
$\Delta\theta$ g,d	−0.0024
$\Delta\theta$ g,F	−0.0016
$\Delta\theta$ i,g	0.0053

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01034	0.00455	0.00411	0.00740
θ C,t	θ C,A'	θ d,C	θ e,C
0.747	0.329	0.297	0.534
ng−nd	ng−nF	nh−ng	ni−ng
0.01767	0.00793	0.00681	0.01897
θ g,d	θ g,F	θ h,g	θ i,g
1.276	0.573	0.492	1.370
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01099	0.00675	0.00727	0.02608
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.784	0.481	0.519	1.860

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	425 (4)
ビッカース硬さ Hv Vickers Hardness	451
磨耗度 Ha Abrasion	140
ヤング率 E (10^8N/m^2) Young's Modulus	629
剛性率 G (10^8N/m^2) Modulus of Rigidity	257
ポアソン比 σ Poisson Ratio	0.223

化学的性質 Chemical Properties

耐水性(粉末法) RW Water Resistance	1
耐酸性(粉末法) RA Acid Resistance	1
耐候性(表面法) DW Weather Resistance	1

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	447
屈伏点 At (℃) Yielding Point	498
線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	102
備考 Remark s	

その他 Other Properties

泡 B Bubbles	
着色度 C Color Degree	35/32
比重 S.g Specific Gravity	3.22
脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.16 2	0.01 0
330	0.58 8	0.26 5
340	0.79 9	0.57 1
350	0.90 1	0.77 1
360	0.95 3	0.88 7
370	0.97 4	0.93 7
380	0.97 8	0.94 7
390	0.99 1	0.97 8
400	0.99 5	0.98 9
420	0.99 5	0.98 9
440	0.99 5	0.98 9
460	0.99 7	0.99 2
480	0.99 7	0.99 2
500	0.99 7	0.99 2
550	0.99 7	0.99 2
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.93 4	0.84 5

578417 Schott Type LF4	nd 1.57845	νd 41.7	nF−nC 0.01387
	ne 1.58174	νe 41.4	nF'−nC' 0.01404

屈折率 Refractive Indices		
nt	1014.0	1.56401
nA'	768.2	1.56979
nr	706.5	1.57205
nC	656.3	1.57434
nC'	643.9	1.57499
nD	589.3	1.57833
nd	587.6	1.57845
ne	546.1	1.58174
nF	486.1	1.58821
nF'	480.0	1.58903
ng	435.8	1.59615
nG'	434.1	
nh	404.7	1.60298
ni	365.0	1.61514

分散式の常数 Constans of Dispersion Formula	
A0	2.4363190
A1	−8.5401033 ×10 $^{-3}$
A2	1.8663876 ×10 $^{-2}$
A3	4.5300742 ×10 $^{-4}$
A4	6.6459967 ×10 $^{-6}$
A5	1.6027138 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0040
Δθ C,A'	0.0006
Δθ g,d	−0.0027
Δθ g,F	−0.0022
Δθ i,g	0.0022

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01033	0.00455	0.00411	0.00740
θ C,t	θ C,A'	θ d,C	θ e,C
0.745	0.328	0.296	0.534
ng−nd	ng−nF	nh−ng	ni−ng
0.01770	0.00794	0.00683	0.01899
θ g,d	θ g,F	θ h,g	θ i,g
1.276	0.572	0.492	1.369
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01098	0.00675	0.00729	0.02611
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.782	0.481	0.519	1.860

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 479 (5)	転移点 Tg (℃) Transformation Point 441
ビッカース硬さ Hv Vickers Hardness 478	屈伏点 At (℃) Yielding Point 498
磨耗度 Ha Abrasion 130	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 98
ヤング率 E (10^{8}N/m^2) Young's Modulus 607	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 249	
ポアソン比 σ Poisson Ratio 0.218	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 35/31
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.20
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.02 $_2$	
320	0.18 $_7$	0.01 $_5$
330	0.61 $_3$	0.29 $_4$
340	0.82 $_6$	0.62 $_0$
350	0.91 $_5$	0.80 $_1$
360	0.95 $_7$	0.89 $_6$
370	0.97 $_5$	0.94 $_0$
380	0.97 $_5$	0.94 $_0$
390	0.98 $_5$	0.96 $_4$
400	0.98 $_8$	0.97 $_1$
420	0.98 $_8$	0.97 $_1$
440	0.99 $_0$	0.97 $_5$
460	0.99 $_0$	0.97 $_5$
480	0.99 $_0$	0.97 $_5$
500	0.99 $_2$	0.98 $_2$
550	0.99 $_5$	0.98 $_9$
600	0.99 $_5$	0.98 $_9$
650	0.99 $_5$	0.98 $_9$
700	0.99 $_7$	0.99 $_2$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_8$	0.99 $_6$
2000	0.95 $_3$	0.88 $_7$

581408 Schott Type LF5	nd 1.58144	ν d 40.8	nF−nC 0.01425
	ne 1.58482	ν e 40.5	nF'−nC' 0.01443

屈折率 Refractive Indices		
nt	1014.0	1.56669
nA'	768.2	1.57258
nr	706.5	1.57488
nC	656.3	1.57722
nC'	643.9	1.57789
nD	589.3	1.58131
nd	587.6	1.58144
ne	546.1	1.58482
nF	486.1	1.59147
nF'	480.0	1.59232
ng	435.8	1.59966
nG'	434.1	
nh	404.7	1.60670
ni	365.0	1.61930

分散式の常数 Constans of Dispersion Formula	
A0	2.4448729
A1	$-8.7715713 \times 10^{-3}$
A2	1.8544331×10^{-2}
A3	6.8199314×10^{-4}
A4	$-2.3505236 \times 10^{-5}$
A5	3.3917827×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0024
$\Delta\theta$ C,A'	−0.0008
$\Delta\theta$ g,d	−0.0021
$\Delta\theta$ g,F	−0.0013
$\Delta\theta$ i,g	0.0043

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01053	0.00464	0.00422	0.00760
θ C,t	θ C,A'	θ d,C	θ e,C
0.739	0.326	0.296	0.533
ng−nd	ng−nF	nh−ng	ni−ng
0.01822	0.00819	0.00704	0.01964
θ g,d	θ g,F	θ h,g	θ i,g
1.279	0.575	0.494	1.378
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01120	0.00693	0.00750	0.02698
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.776	0.480	0.520	1.870

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 405 (4)	転移点 Tg (℃) Transformation Point 465
ビッカース硬さ Hv Vickers Hardness 388	屈伏点 At (℃) Yielding Point 484
磨耗度 Ha Abrasion 140	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 100
ヤング率 E (10^8N/m^2) Young's Modulus 584	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 240	
ポアソン比 σ Poisson Ratio 0.218	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 34/31
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.23
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.05 0	
320	0.37 1	0.08 4
330	0.74 0	0.47 1
340	0.95 7	0.89 6
350	0.95 0	0.88 0
360	0.97 1	0.93 0
370	0.98 2	0.95 7
380	0.98 4	0.96 1
390	0.99 0	0.97 5
400	0.99 1	0.97 8
420	0.99 2	0.98 2
440	0.99 2	0.98 2
460	0.99 4	0.98 5
480	0.99 4	0.98 5
500	0.99 5	0.98 9
550	0.99 5	0.98 9
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 5	0.98 9
2000	0.93 6	0.84 8

567428 Schott Type LF6	nd 1.56732	ν d 42.8	nF−nC 0.01325
	ne 1.57047	ν e 42.5	nF'−nC' 0.01341

屈折率 Refractive Indices		
nt	1014.0	1.55343
nA'	768.2	1.55902
nr	706.5	1.56119
nC	656.3	1.56339
nC'	643.9	1.56401
nD	589.3	1.56721
nd	587.6	1.56732
ne	546.1	1.57047
nF	486.1	1.57664
nF'	480.0	1.57742
ng	435.8	1.58420
nG'	434.1	
nh	404.7	1.59068
ni	365.0	1.60221

分散式の常数 Constans of Dispersion Formula	
A0	2.4047907
A1	$-8.7988392 \times 10^{-3}$
A2	1.7370670×10^{-2}
A3	5.4422581×10^{-4}
A4	$-1.2510046 \times 10^{-5}$
A5	2.4310864×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0058
$\Delta\theta$ C,A'	0.0011
$\Delta\theta$ g,d	−0.0027
$\Delta\theta$ g,F	−0.0025
$\Delta\theta$ i,g	0.0009

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00996	0.00437	0.00393	0.00708
θ C,t	θ C,A'	θ d,C	θ e,C
0.752	0.330	0.297	0.534
ng−nd	ng−nF	nh−ng	ni−ng
0.01688	0.00756	0.00648	0.01801
θ g,d	θ g,F	θ h,g	θ i,g
1.274	0.571	0.489	1.359
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01058	0.00646	0.00695	0.02479
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.789	0.482	0.518	1.849

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 456 (5)	転移点 Tg (℃) Transformation Point 442
ビッカース硬さ Hv Vickers Hardness 462	屈伏点 At (℃) Yielding Point 492
磨耗度 Ha Abrasion 140	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 91
ヤング率 E (10^8N/m^2) Young's Modulus 600	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 248	
ポアソン比 σ Poisson Ratio 0.209	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 34/31
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.12
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.01 3	
320	0.33 4	0.06 4
330	0.74 0	0.47 1
340	0.90 9	0.78 9
350	0.95 7	0.89 6
360	0.98 1	0.95 4
370	0.99 0	0.97 5
380	0.99 0	0.97 5
390	0.99 5	0.98 9
400	0.99 7	0.99 2
420	0.99 7	0.99 2
440	0.99 7	0.99 2
460	0.99 7	0.99 2
480	0.99 7	0.99 2
500	0.99 7	0.99 2
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 7	0.99 2
1500	0.99 4	0.98 5
2000	0.93 7	0.85 1

575413 Schott Type LF7	nd 1.57501	ν d 41.3	nF−nC 0.01392
	ne 1.57831	ν e 41.0	nF'−nC' 0.01410

屈折率 Refractive Indices		
nt	1014.0	1.56058
nA'	768.2	1.56633
nr	706.5	1.56859
nC	656.3	1.57089
nC'	643.9	1.57153
nD	589.3	1.57489
nd	587.6	1.57501
ne	546.1	1.57831
nF	486.1	1.58481
nF'	480.0	1.58563
ng	435.8	1.59278
nG'	434.1	
nh	404.7	1.59964
ni	365.0	1.61185

分散式の常数 Constans of Dispersion Formula	
A0	2.4248798
A1	$-7.9967935 \times 10^{-3}$
A2	1.8851219×10^{-2}
A3	4.3158299×10^{-4}
A4	8.1793739×10^{-6}
A5	1.5720523×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0018
$\Delta\theta$ C,A'	0.0006
$\Delta\theta$ g,d	−0.0031
$\Delta\theta$ g,F	−0.0027
$\Delta\theta$ i,g	−0.0001

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01031	0.00456	0.00412	0.00742
θ C,t	θ C,A'	θ d,C	θ e,C
0.741	0.328	0.296	0.533
ng−nd	ng−nF	nh−ng	ni−ng
0.01777	0.00797	0.00686	0.01907
θ g,d	θ g,F	θ h,g	θ i,g
1.277	0.573	0.493	1.370
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01095	0.00678	0.00732	0.02622
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.777	0.481	0.519	1.860

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 420 (4)	転移点 Tg (℃) Transformation Point 448
ビッカース硬さ Hv Vickers Hardness 428	屈伏点 At (℃) Yielding Point 490
磨耗度 Ha Abrasion 130	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 89
ヤング率 E (10^8N/m^2) Young's Modulus 566	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 232	
ポアソン比 σ Poisson Ratio 0.222	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 34/31
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.20
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.01 $_0$	
320	0.29 $_4$	0.04 $_7$
330	0.70 $_1$	0.41 $_1$
340	0.88 $_2$	0.73 $_0$
350	0.94 $_3$	0.86 $_4$
360	0.97 $_1$	0.93 $_0$
370	0.98 $_1$	0.95 $_4$
380	0.98 $_1$	0.95 $_4$
390	0.98 $_2$	0.95 $_7$
400	0.98 $_5$	0.96 $_4$
420	0.98 $_8$	0.97 $_1$
440	0.98 $_8$	0.97 $_1$
460	0.98 $_8$	0.97 $_1$
480	0.99 $_0$	0.97 $_5$
500	0.99 $_0$	0.97 $_5$
550	0.99 $_4$	0.98 $_5$
600	0.99 $_5$	0.98 $_9$
650	0.99 $_7$	0.99 $_2$
700	0.99 $_7$	0.99 $_2$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_8$	0.99 $_6$
2000	0.95 $_1$	0.88 $_3$

557485 Schott Type BaF1	nd 1.55690	ν d 48.5	nF−nC 0.01148
	ne 1.55963	ν e 48.2	nF'−nC' 0.01161

屈折率 Refractive Indices		
nt	1014.0	1.54468
nA'	768.2	1.54965
nr	706.5	1.55155
nC	656.3	1.55347
nC'	643.9	1.55401
nD	589.3	1.55680
nd	587.6	1.55690
ne	546.1	1.55963
nF	486.1	1.56495
nF'	480.0	1.56562
ng	435.8	1.57140
nG'	434.1	
nh	404.7	1.57686
ni	365.0	1.58646

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00879	0.00382	0.00343	0.00616
θ C,t	θ C,A'	θ d,C	θ e,C
0.766	0.333	0.299	0.537
ng−nd	ng−nF	nh−ng	ni−ng
0.01450	0.00645	0.00546	0.01506
θ g,d	θ g,F	θ h,g	θ i,g
1.263	0.562	0.476	1.312
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00933	0.00562	0.00599	0.02084
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.804	0.484	0.516	1.795

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.05 0	
320	0.36 0	0.07 8
330	0.71 4	0.43 0
340	0.87 3	0.71 4
350	0.94 7	0.87 4
360	0.97 5	0.94 0
370	0.98 5	0.96 4
380	0.98 8	0.97 1
390	0.99 5	0.98 9
400	0.99 7	0.99 2
420	0.99 7	0.99 2
440	0.99 7	0.99 2
460	0.99 7	0.99 2
480	0.99 7	0.99 2
500	0.99 7	0.99 2
550	0.99 7	0.99 2
600	0.99 7	0.99 2
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 7	0.99 2
2000	0.91 8	0.80 7

分散式の常数 Constans of Dispersion Formula	
A0	2.3807194
A1	$-8.8628548 \times 10^{-3}$
A2	1.4132660×10^{-2}
A3	7.7813520×10^{-4}
A4	$-6.1040108 \times 10^{-5}$
A5	4.1652323×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0068
$\Delta\theta$ C,A'	−0.0025
$\Delta\theta$ g,d	−0.0022
$\Delta\theta$ g,F	−0.0027
$\Delta\theta$ i,g	−0.0023

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 427 (4)	転移点 Tg (℃) Transformation Point 468
ビッカース硬さ Hv Vickers Hardness 395	屈伏点 At (℃) Yielding Point 526
磨耗度 Ha Abrasion 140	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 108
ヤング率 E (10^8N/m^2) Young's Modulus 600	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 243	
ポアソン比 σ Poisson Ratio 0.233	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 34/31
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.02
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

583465 Schott Type BaF3	nd	1.58267	ν d	46.5	nF−nC 0.01254
	ne	1.58565	ν e	46.2	nF'−nC' 0.01269

屈折率 Refractive Indices		
nt	1014.0	1.56925
nA'	768.2	1.57478
nr	706.5	1.57685
nC	656.3	1.57893
nC'	643.9	1.57952
nD	589.3	1.58256
nd	587.6	1.58267
ne	546.1	1.58565
nF	486.1	1.59147
nF'	480.0	1.59221
ng	435.8	1.59857
nG'	434.1	
nh	404.7	1.60460
ni	365.0	1.61532

分散式の常数 Constans of Dispersion Formula	
A0	2.4614368
A1	$-1.2559687 \times 10^{-2}$
A2	1.3043852×10^{-2}
A3	1.5514968×10^{-3}
A4	$-1.5232068 \times 10^{-4}$
A5	9.0114350×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0090
$\Delta\theta$ C,A'	−0.0020
$\Delta\theta$ g,d	−0.0014
$\Delta\theta$ g,F	−0.0014
$\Delta\theta$ i,g	0.0057

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00968	0.00415	0.00374	0.00672
θ C,t	θ C,A'	θ d,C	θ e,C
0.772	0.331	0.298	0.536
ng−nd	ng−nF	nh−ng	ni−ng
0.01590	0.00710	0.00603	0.01675
θ g,d	θ g,F	θ h,g	θ i,g
1.268	0.566	0.481	1.336
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01027	0.00613	0.00656	0.02311
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.809	0.483	0.517	1.821

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	495 (5)	転移点 Tg (℃) Transformation Point	466
ビッカース硬さ Hv Vickers Hardness	514	屈伏点 At (℃) Yielding Point	518
磨耗度 Ha Abrasion	130	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	96
ヤング率 E (10^8N/m^2) Young's Modulus	765	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	312		
ポアソン比 σ Poisson Ratio	0.227	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	37/33
耐酸性(粉末法) RA Acid Resistance	1	比重 S.g Specific Gravity	3.01
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.02 7	
340	0.27 9	0.04 1
350	0.62 5	0.30 9
360	0.81 6	0.60 3
370	0.91 2	0.79 5
380	0.95 0	0.88 0
390	0.97 1	0.93 0
400	0.97 8	0.94 7
420	0.98 5	0.96 4
440	0.98 5	0.96 4
460	0.98 8	0.97 1
480	0.99 0	0.97 5
500	0.99 0	0.97 5
550	0.99 2	0.98 2
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.96 8	0.92 3

606439 Schott Type BaF4	nd 1.60562	ν d 43.9	nF−nC 0.01379
	ne 1.60889	ν e 43.6	nF'−nC' 0.01396

屈折率 Refractive Indices		
nt	1014.0	1.59116
nA'	768.2	1.59700
nr	706.5	1.59925
nC	656.3	1.60153
nC'	643.9	1.60217
nD	589.3	1.60550
nd	587.6	1.60562
ne	546.1	1.60889
nF	486.1	1.61532
nF'	480.0	1.61613
ng	435.8	1.62318
nG'	434.1	
nh	404.7	1.62990
ni	365.0	1.64185

分散式の常数 Constans of Dispersion Formula	
A0	2.5258580
A1	$-1.0870078 \times 10^{-2}$
A2	1.6542807×10^{-2}
A3	1.1569891×10^{-3}
A4	$-8.8562388 \times 10^{-5}$
A5	6.1033724×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0009
$\Delta\theta$ C,A'	−0.0015
$\Delta\theta$ g,d	−0.0011
$\Delta\theta$ g,F	−0.0014
$\Delta\theta$ i,g	0.0041

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01037	0.00453	0.00409	0.00736
θ C,t	θ C,A'	θ d,C	θ e,C
0.752	0.328	0.297	0.534
ng−nd	ng−nF	nh−ng	ni−ng
0.01756	0.00786	0.00672	0.01867
θ g,d	θ g,F	θ h,g	θ i,g
1.273	0.570	0.487	1.354
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01101	0.00672	0.00724	0.02572
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.789	0.481	0.519	1.842

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 476 (5)	転移点 Tg (℃) Transformation Point 437
ビッカース硬さ Hv Vickers Hardness 498	屈伏点 At (℃) Yielding Point 483
磨耗度 Ha Abrasion 150	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 105
ヤング率 E (10^8N/m^2) Young's Modulus 745	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 301	
ポアソン比 σ Poisson Ratio 0.237	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 37/33
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.30
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.04 0	
340	0.14 5	
350	0.50 5	0.18 1
360	0.76 8	0.51 8
370	0.88 7	0.74 2
380	0.94 3	0.86 4
390	0.96 7	0.92 0
400	0.97 8	0.94 7
420	0.98 5	0.96 4
440	0.98 8	0.97 1
460	0.98 8	0.97 1
480	0.99 0	0.97 5
500	0.99 2	0.98 2
550	0.99 4	0.98 5
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 5	0.94 0

607493 Schott Type BaF5	nd 1.60729	ν d 49.3	nF−nC 0.01233
	ne 1.61022	ν e 48.9	nF'−nC' 0.01247

屈折率 Refractive Indices		
nt	1014.0	1.59413
nA'	768.2	1.59948
nr	706.5	1.60153
nC	656.3	1.60360
nC'	643.9	1.60418
nD	589.3	1.60718
nd	587.6	1.60729
ne	546.1	1.61022
nF	486.1	1.61593
nF'	480.0	1.61665
ng	435.8	1.62284
nG'	434.1	
nh	404.7	1.62869
ni	365.0	1.63890

分散式の常数 Constans of Dispersion Formula	
A0	2.5336529
A1	$-9.0692334 \times 10^{-3}$
A2	1.6953197×10^{-2}
A3	4.6812228×10^{-4}
A4	$-1.1912480 \times 10^{-5}$
A5	1.5671330×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0079
$\Delta\theta$ C,A'	−0.0020
$\Delta\theta$ g,d	−0.0027
$\Delta\theta$ g,F	−0.0030
$\Delta\theta$ i,g	−0.0059

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00947	0.00412	0.00369	0.00662
θ C,t	θ C,A'	θ d,C	θ e,C
0.768	0.334	0.299	0.537
ng−nd	ng−nF	nh−ng	ni−ng
0.01555	0.00691	0.00585	0.01606
θ g,d	θ g,F	θ h,g	θ i,g
1.261	0.560	0.474	1.303
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01005	0.00604	0.00643	0.02225
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.806	0.484	0.516	1.784

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 620 (6)	転移点 Tg (℃) Transformation Point 564
ビッカース硬さ Hv Vickers Hardness 620	屈伏点 At (℃) Yielding Point 617
磨耗度 Ha Abrasion 150	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 81
ヤング率 E (10^8N/m^2) Young's Modulus 746	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 298	
ポアソン比 σ Poisson Ratio 0.250	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 36/32
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 3.51
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.03 7	
330	0.32 9	0.06 2
340	0.64 6	0.33 6
350	0.81 2	0.59 5
360	0.89 7	0.76 2
370	0.94 0	0.85 7
380	0.96 0	0.90 3
390	0.97 1	0.93 0
400	0.98 0	0.95 0
420	0.98 5	0.96 4
440	0.98 8	0.97 1
460	0.99 0	0.97 5
480	0.99 1	0.97 8
500	0.99 4	0.98 5
550	0.99 5	0.98 9
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 7	0.99 2
1500	0.99 2	0.98 2
2000	0.97 1	0.93 0

624471 Schott Type	nd 1.62374	ν d 47.1	nF−nC 0.01325
BaF8	ne 1.62689	ν e 46.8	nF'−nC' 0.01339

屈折率 Refractive Indices		
nt	1014.0	1.60973
nA'	768.2	1.61539
nr	706.5	1.61758
nC	656.3	1.61979
nC'	643.9	1.62042
nD	589.3	1.62363
nd	587.6	1.62374
ne	546.1	1.62689
nF	486.1	1.63304
nF'	480.0	1.63381
ng	435.8	1.64051
nG'	434.1	
nh	404.7	1.64687
ni	365.0	1.65806

分散式の常数 Constans of Dispersion Formula	
A0	2.5825322
A1	$-9.3209785 \times 10^{-3}$
A2	1.8295063×10^{-2}
A3	5.2732239×10^{-4}
A4	$-1.4104414 \times 10^{-5}$
A5	2.1483623×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0066
$\Delta\theta$ C,A'	−0.0015
$\Delta\theta$ g,d	−0.0025
$\Delta\theta$ g,F	−0.0029
$\Delta\theta$ i,g	−0.0008

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01006	0.00440	0.00395	0.00710
θ C,t	θ C,A'	θ d,C	θ e,C
0.759	0.332	0.298	0.536
ng−nd	ng−nF	nh−ng	ni−ng
0.01677	0.00747	0.00636	0.01755
θ g,d	θ g,F	θ h,g	θ i,g
1.266	0.564	0.480	1.325
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01069	0.00647	0.00692	0.02425
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.798	0.483	0.517	1.811

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	477 (5)	転移点 Tg (℃) Transformation Point	571
ビッカース硬さ Hv Vickers Hardness	474	屈伏点 At (℃) Yielding Point	625
磨耗度 Ha Abrasion	160	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	82
ヤング率 E (10^8N/m^2) Young's Modulus	734	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	292		
ポアソン比 σ Poisson Ratio	0.256	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	36/32
耐酸性(粉末法) RA Acid Resistance	4	比重 S.g Specific Gravity	3.66
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.01 5	
330	0.27 0	0.03 7
340	0.62 9	0.31 3
350	0.82 2	0.61 3
360	0.90 8	0.78 6
370	0.94 3	0.86 4
380	0.96 3	0.91 0
390	0.97 4	0.93 7
400	0.98 1	0.95 4
420	0.98 5	0.96 4
440	0.98 8	0.97 1
460	0.99 0	0.97 5
480	0.99 1	0.97 8
500	0.99 1	0.97 8
550	0.99 5	0.98 9
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.98 8	0.97 1
1500	0.98 2	0.95 7
2000	0.95 7	0.89 6

643478 Schott Type	nd 1.64328	ν d 47.8	nF−nC 0.01347
BaF9	ne 1.64650	ν e 47.4	nF'−nC' 0.01364

屈折率 Refractive Indices		
nt	1014.0	1.62901
nA'	768.2	1.63478
nr	706.5	1.63701
nC	656.3	1.63926
nC'	643.9	1.63990
nD	589.3	1.64317
nd	587.6	1.64328
ne	546.1	1.64650
nF	486.1	1.65273
nF'	480.0	1.65354
ng	435.8	1.66034
nG'	434.1	
nh	404.7	1.66680
ni	365.0	1.67815

分散式の常数 Constans of Dispersion Formula	
A0	2.6440649
A1	$-9.3006126 \times 10^{-3}$
A2	1.9304566×10^{-2}
A3	4.1507568×10^{-4}
A4	1.6918370×10^{-6}
A5	1.3784268×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0080
$\Delta\theta$ C,A'	−0.0018
$\Delta\theta$ g,d	−0.0003
$\Delta\theta$ g,F	−0.0007
$\Delta\theta$ i,g	0.0022

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01025	0.00448	0.00402	0.00724
θ C,t	θ C,A'	θ d,C	θ e,C
0.761	0.333	0.298	0.537
ng−nd	ng−nF	nh−ng	ni−ng
0.01706	0.00761	0.00646	0.01781
θ g,d	θ g,F	θ h,g	θ i,g
1.267	0.565	0.480	1.322
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01089	0.00660	0.00704	0.02461
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.798	0.484	0.516	1.804

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	507 (5)	転移点 Tg (℃) Transformation Point	607
ビッカース硬さ Hv Vickers Hardness	505	屈伏点 At (℃) Yielding Point	653
磨耗度 Ha Abrasion	170	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	82
ヤング率 E (10^8N/m^2) Young's Modulus	794	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	314		
ポアソン比 σ Poisson Ratio	0.267	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	38/34
耐酸性(粉末法) RA Acid Resistance	4	比重 S.g Specific Gravity	3.72
耐候性(表面法) DW Weather Resistance	2	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.03 7	
330	0.29 9	0.04 9
340	0.60 6	0.28 6
350	0.79 2	0.55 9
360	0.88 3	0.73 3
370	0.93 3	0.84 2
380	0.95 7	0.89 6
390	0.96 8	0.92 3
400	0.97 5	0.94 0
420	0.98 2	0.95 7
440	0.98 8	0.97 1
460	0.99 0	0.97 5
480	0.99 1	0.97 8
500	0.99 4	0.98 5
550	0.99 5	0.98 9
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 1	0.97 8
1500	0.98 2	0.95 7
2000	0.96 0	0.90 3

670472 Schott Type	nd 1.67003	ν d 47.2	nF−nC 0.01420
BaF10	ne 1.67340	ν e 46.9	nF'−nC' 0.01436

屈折率 Refractive Indices		
nt	1014.0	1.65503
nA'	768.2	1.66108
nr	706.5	1.66342
nC	656.3	1.66579
nC'	643.9	1.66646
nD	589.3	1.66990
nd	587.6	1.67003
ne	546.1	1.67340
nF	486.1	1.67999
nF'	480.0	1.68082
ng	435.8	1.68800
nG'	434.1	
nh	404.7	1.69482
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	2.7285663
A1	$-9.6871822 \times 10^{-3}$
A2	2.0640158×10^{-2}
A3	4.7067741×10^{-4}
A4	$-4.4169395 \times 10^{-6}$
A5	2.0375466×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0086
$\Delta\theta$ C,A'	−0.0021
$\Delta\theta$ g,d	−0.0025
$\Delta\theta$ g,F	−0.0024
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01076	0.00471	0.00424	0.00761
θ C,t	θ C,A'	θ d,C	θ e,C
0.758	0.332	0.299	0.536
ng−nd	ng−nF	nh−ng	ni−ng
0.01797	0.00801	0.00682	
θ g,d	θ g,F	θ h,g	θ i,g
1.265	0.564	0.480	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01143	0.00694	0.00742	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.796	0.483	0.517	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 514 (5)	転移点 Tg (℃) Transformation Point 635
ビッカース硬さ Hv Vickers Hardness 536	屈伏点 At (℃) Yielding Point 674
磨耗度 Ha Abrasion 190	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 87
ヤング率 E (10^8N/m^2) Young's Modulus 845	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 330	
ポアソン比 σ Poisson Ratio 0.279	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 40/35
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.84
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350	0.07 6	
360	0.28 9	0.04 5
370	0.55 8	0.23 2
380	0.74 6	0.48 1
390	0.78 6	0.54 7
400	0.91 5	0.80 1
420	0.96 4	0.91 3
440	0.97 8	0.94 7
460	0.98 5	0.96 4
480	0.99 0	0.97 5
500	0.99 5	0.98 9
550	0.99 7	0.99 2
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.98 0	0.95 0

667484 Schott Type	nd 1.66672	ν d 48.4	nF−nC 0.01378
BaF11	ne 1.67000	ν e 48.1	nF'−nC' 0.01393

屈折率 Refractive Indices

nt	1014.0	1.65207
nA'	768.2	1.65800
nr	706.5	1.66029
nC	656.3	1.66260
nC'	643.9	1.66325
nD	589.3	1.66660
nd	587.6	1.66672
ne	546.1	1.67000
nF	486.1	1.67638
nF'	480.0	1.67718
ng	435.8	1.68412
nG'	434.1	
nh	404.7	1.69068
ni	365.0	1.70223

分散式の常数 Constans of Dispersion Formula

A0	2.7202013
A1	$-1.0140374 \times 10^{-2}$
A2	1.9532939×10^{-2}
A3	6.2156879×10^{-4}
A4	$-3.1701610 \times 10^{-5}$
A5	3.3154495×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	−0.0078
$\Delta\theta$ C,A'	−0.0013
$\Delta\theta$ g,d	−0.0029
$\Delta\theta$ g,F	−0.0031
$\Delta\theta$ i,g	−0.0010

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01053	0.00460	0.00412	0.00740
θ C,t	θ C,A'	θ d,C	θ e,C
0.764	0.334	0.299	0.537
ng−nd	ng−nF	nh−ng	ni−ng
0.01740	0.00774	0.00656	0.01811
θ g,d	θ g,F	θ h,g	θ i,g
1.263	0.562	0.476	1.314
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01118	0.00675	0.00718	0.02505
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.803	0.485	0.515	1.798

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 489 (5)	転移点 Tg (℃) Transformation Point 641
ビッカース硬さ Hv Vickers Hardness 486	屈伏点 At (℃) Yielding Point 678
磨耗度 Ha Abrasion 180	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 86
ヤング率 E (10^8N/m^2) Young's Modulus 838	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 328	
ポアソン比 σ Poisson Ratio 0.278	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 39/34
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.83
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.05 0	
350	0.22 3	0.02 3
360	0.52 8	0.20 3
370	0.75 9	0.50 3
380	0.87 3	0.71 4
390	0.93 3	0.84 2
400	0.96 3	0.91 0
420	0.98 1	0.95 4
440	0.98 5	0.96 4
460	0.99 0	0.97 5
480	0.99 1	0.97 8
500	0.99 5	0.98 9
550	0.99 7	0.99 2
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 8	0.94 4

639450 Schott Type **BaF12**	nd 1.63930	ν d 45.0	nF−nC 0.01421
	ne 1.64268	ν e 44.7	nF'−nC' 0.01438

屈折率 Refractive Indices		
nt	1014.0	1.62443
nA'	768.2	1.63038
nr	706.5	1.63271
nC	656.3	1.63507
nC'	643.9	1.63574
nD	589.3	1.63918
nd	587.6	1.63930
ne	546.1	1.64268
nF	486.1	1.64928
nF'	480.0	1.65012
ng	435.8	1.65736
nG'	434.1	
nh	404.7	1.66426
ni	365.0	1.67646

分散式の常数 Constans of Dispersion Formula	
A0	2.6263688
A1	$-8.1822443 \times 10^{-3}$
A2	2.1212967×10^{-2}
A3	1.5308351×10^{-4}
A4	4.3537326×10^{-5}
A5	$-3.1692421 \times 10^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0073
$\Delta\theta$ C,A'	−0.0012
$\Delta\theta$ g,d	−0.0014
$\Delta\theta$ g,F	−0.0012
$\Delta\theta$ i,g	0.0026

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01064	0.00469	0.00423	0.00761
θ C,t	θ C,A'	θ d,C	θ e,C
0.749	0.330	0.298	0.536
ng−nd	ng−nF	nh−ng	ni−ng
0.01806	0.00808	0.00690	0.01910
θ g,d	θ g,F	θ h,g	θ i,g
1.271	0.569	0.486	1.344
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01131	0.00694	0.00744	0.02634
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.787	0.483	0.517	1.832

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 524 (5)	転移点 Tg (℃) Transformation Point 564
ビッカース硬さ Hv Vickers Hardness 527	屈伏点 At (℃) Yielding Point 617
磨耗度 Ha Abrasion 170	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 86
ヤング率 E (10^8N/m^2) Young's Modulus 691	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 292	
ポアソン比 σ Poisson Ratio 0.185	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 39/34
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.73
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.13 8	
350	0.42 5	0.11 8
360	0.66 3	0.35 7
370	0.80 6	0.58 3
380	0.88 0	0.72 8
390	0.92 3	0.82 0
400	0.94 7	0.87 4
420	0.97 1	0.93 0
440	0.98 1	0.95 4
460	0.98 4	0.96 1
480	0.98 7	0.96 8
500	0.98 8	0.97 1
550	0.99 2	0.98 2
600	0.99 2	0.98 2
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.99 5	0.98 9

683445 Schott Type BaFn1	nd	1.68250	ν d	44.5	nF−nC 0.01534
	ne	1.68615	ν e	44.2	nF'−nC' 0.01553

屈折率 Refractive Indices

nt	1014.0	1.66660
nA'	768.2	1.67293
nr	706.5	1.67542
nC	656.3	1.67795
nC'	643.9	1.67866
nD	589.3	1.68237
nd	587.6	1.68250
ne	546.1	1.68615
nF	486.1	1.69329
nF'	480.0	1.69419
ng	435.8	1.70199
nG'	434.1	
nh	404.7	1.70941
ni	365.0	1.72256

分散式の常数 Constans of Dispersion Formula

A0	2.7675172
A1	$-1.0367421 \times 10^{-2}$
A2	2.0151257×10^{-2}
A3	1.2573013×10^{-3}
A4	$-1.0596132 \times 10^{-4}$
A5	7.5020291×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	−0.0139
$\Delta\theta$ C,A'	−0.0034
$\Delta\theta$ g,d	−0.0028
$\Delta\theta$ g,F	−0.0034
$\Delta\theta$ i,g	−0.0044

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01135	0.00502	0.00455	0.00820
θ C,t	θ C,A'	θ d,C	θ e,C
0.740	0.327	0.297	0.535
ng−nd	ng−nF	nh−ng	ni−ng
0.01949	0.00870	0.00742	0.02057
θ g,d	θ g,F	θ h,g	θ i,g
1.271	0.567	0.484	1.341
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01206	0.00749	0.00804	0.02837
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.777	0.482	0.518	1.827

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 465 (5)	転移点 Tg (℃) Transformation Point 599
ビッカース硬さ Hv Vickers Hardness 514	屈伏点 At (℃) Yielding Point 656
磨耗度 Ha Abrasion 190	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 86
ヤング率 E (10^8N/m^2) Young's Modulus 812	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 317	
ポアソン比 σ Poisson Ratio 0.281	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 38/34
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.98
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.01 0	
340	0.19 6	0.01 7
350	0.54 0	0.21 4
360	0.77 2	0.52 5
370	0.88 3	0.73 3
380	0.93 6	0.84 8
390	0.96 1	0.90 6
400	0.97 5	0.94 0
420	0.98 5	0.96 4
440	0.98 8	0.97 1
460	0.99 1	0.97 8
480	0.99 5	0.98 9
500	0.99 5	0.98 9
550	0.99 7	0.99 2
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.98 5	0.96 4

664492 Schott Type **BaFn3**	nd	1.66422	ν d	49.2	nF−nC 0.01350
	ne	1.66744	ν e	48.9	nF'−nC' 0.01365

屈折率 Refractive Indices		
nt	1014.0	1.64986
nA'	768.2	1.65567
nr	706.5	1.65791
nC	656.3	1.66019
nC'	643.9	1.66082
nD	589.3	1.66411
nd	587.6	1.66422
ne	546.1	1.66744
nF	486.1	1.67369
nF'	480.0	1.67447
ng	435.8	1.68126
nG'	434.1	
nh	404.7	1.68767
ni	365.0	1.69889

分散式の常数 Constans of Dispersion Formula	
A0	2.7114540
A1	$-9.1156010 \times 10^{-3}$
A2	2.0237189×10^{-2}
A3	2.7232007×10^{-4}
A4	1.6183798×10^{-5}
A5	6.0327290×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0105
$\Delta\theta$ C,A'	−0.0013
$\Delta\theta$ g,d	−0.0017
$\Delta\theta$ g,F	−0.0028
$\Delta\theta$ i,g	−0.0029

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01033	0.00452	0.00403	0.00725
θ C,t	θ C,A'	θ d,C	θ e,C
0.765	0.335	0.299	0.537
ng−nd	ng−nF	nh−ng	ni−ng
0.01704	0.00757	0.00641	0.01763
θ g,d	θ g,F	θ h,g	θ i,g
1.262	0.561	0.475	1.306
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01096	0.00662	0.00703	0.02442
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.803	0.485	0.515	1.789

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	513 (5)	転移点 Tg (℃) Transformation Point	632
ビッカース硬さ Hv Vickers Hardness	522	屈伏点 At (℃) Yielding Point	675
磨耗度 Ha Abrasion	180	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	85
ヤング率 E (10^8N/m^2) Young's Modulus	816	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	323		
ポアソン比 σ Poisson Ratio	0.263	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	38/34
耐酸性(粉末法) RA Acid Resistance	4	比重 S.g Specific Gravity	3.85
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.05 0	
350	0.25 1	0.03 1
360	0.57 0	0.24 5
370	0.77 2	0.52 5
380	0.87 8	0.72 2
390	0.92 9	0.83 2
400	0.95 3	0.88 7
420	0.97 1	0.93 0
440	0.97 8	0.94 7
460	0.98 2	0.95 7
480	0.98 5	0.96 4
500	0.98 5	0.96 4
550	0.98 8	0.97 1
600	0.99 0	0.97 5
650	0.99 1	0.97 8
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.99 7	0.99 2
1500	0.99 1	0.97 8
2000	0.96 3	0.91 0

664492 Schott Type	nd 1.66422	ν d 49.2	nF−nC 0.01350
K-BaFn3	ne 1.66743	ν e 48.9	nF'−nC' 0.01365

屈折率 Refractive Indices		
nt	1014.0	1.64968
nA'	768.2	1.65563
nr	706.5	1.65789
nC	656.3	1.66017
nC'	643.9	1.66081
nD	589.3	1.66410
nd	587.6	1.66422
ne	546.1	1.66743
nF	486.1	1.67367
nF'	480.0	1.67446
ng	435.8	1.68122
nG'	434.1	
nh	404.7	1.68760
ni	365.0	1.69874

分散式の常数 Constans of Dispersion Formula	
A0	2.7131947
A1	−1.0814545 ×10 $^{-2}$
A2	1.9484148 ×10 $^{-2}$
A3	4.4430542 ×10 $^{-4}$
A4	−4.0766272 ×10 $^{-6}$
A5	1.3929644 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δ θ C,t	0.0013
Δ θ C,A'	0.0002
Δ θ g,d	−0.0047
Δ θ g,F	−0.0043
Δ θ i,g	−0.0111

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01049	0.00454	0.00405	0.00726
θ C,t	θ C,A'	θ d,C	θ e,C
0.777	0.336	0.300	0.538
ng−nd	ng−nF	nh−ng	ni−ng
0.01700	0.00755	0.00638	0.01752
θ g,d	θ g,F	θ h,g	θ i,g
1.259	0.559	0.473	1.298
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01113	0.00662	0.00703	0.02428
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.815	0.485	0.515	1.779

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 554 (6)	転移点 Tg (℃) Transformation Point 616
ビッカース硬さ Hv Vickers Hardness 584	屈伏点 At (℃) Yielding Point 657
磨耗度 Ha Abrasion 174	線膨張係数 α ×10^{-7} Thermal Expansion (100-300℃) 85
ヤング率 E (10^{8}N/m^2) Young's Modulus 911	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 358	
ポアソン比 σ Poisson Ratio 0.271	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 39/34
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.62
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.00 $_1$	
340	0.07 $_0$	0.00 $_1$
350	0.33 $_8$	0.06 $_6$
360	0.61 $_5$	0.29 $_7$
370	0.78 $_8$	0.55 $_1$
380	0.88 $_0$	0.72 $_8$
390	0.93 $_0$	0.83 $_4$
400	0.95 $_6$	0.89 $_3$
420	0.97 $_4$	0.93 $_7$
440	0.98 $_1$	0.95 $_3$
460	0.98 $_6$	0.96 $_6$
480	0.99 $_0$	0.97 $_6$
500	0.99 $_3$	0.98 $_3$
550	0.99 $_5$	0.98 $_9$
600	0.99 $_6$	0.99 $_1$
650	0.99 $_8$	0.99 $_4$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_7$	0.99 $_2$
2000	0.97 $_5$	0.94 $_0$

626356 Schott Type F1	nd 1.62588	ν d 35.6	nF−nC 0.01756
	ne 1.63004	ν e 35.4	nF'−nC' 0.01780

屈折率 Refractive Indices		
nt	1014.0	1.60819
nA'	768.2	1.61512
nr	706.5	1.61789
nC	656.3	1.62073
nC'	643.9	1.62154
nD	589.3	1.62573
nd	587.6	1.62588
ne	546.1	1.63004
nF	486.1	1.63829
nF'	480.0	1.63934
ng	435.8	1.64855
nG'	434.1	
nh	404.7	1.65747
ni	365.0	1.67360

分散式の常数 Constans of Dispersion Formula	
A0	2.5712758
A1	$-8.5633297 \times 10^{-3}$
A2	2.3782403×10^{-2}
A3	7.0039703×10^{-4}
A4	7.9868172×10^{-6}
A5	2.9847088×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0017
$\Delta\theta$ C,A'	−0.0009
$\Delta\theta$ g,d	
$\Delta\theta$ g,F	0.0006
$\Delta\theta$ i,g	0.0126

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01254	0.00561	0.00515	0.00931
θ C,t	θ C,A'	θ d,C	θ e,C
0.714	0.319	0.293	0.530
ng−nd	ng−nF	nh−ng	ni−ng
0.02267	0.01026	0.00892	0.02505
θ g,d	θ g,F	θ h,g	θ i,g
1.291	0.584	0.508	1.427
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01335	0.00850	0.00930	0.03426
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.750	0.478	0.522	1.925

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 469 (5)	転移点 Tg (℃) Transformation Point 423
ビッカース硬さ Hv Vickers Hardness 468	屈伏点 At (℃) Yielding Point 455
磨耗度 Ha Abrasion 150	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 102
ヤング率 E (10^8N/m^2) Young's Modulus 584	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 238	
ポアソン比 σ Poisson Ratio 0.227	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 36/32
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.65
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.02 0	
320	0.27 0	0.03 7
330	0.61 3	0.29 4
340	0.80 8	0.58 8
350	0.90 1	0.77 1
360	0.94 7	0.87 4
370	0.96 3	0.91 0
380	0.98 0	0.95 0
390	0.98 8	0.97 1
400	0.99 0	0.97 5
420	0.99 5	0.98 9
440	0.99 7	0.99 2
460	0.99 7	0.99 2
480	0.99 7	0.99 2
500	0.99 8	0.99 6
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 0	0.97 5
1500	0.98 2	0.95 7
2000	0.93 9	0.85 4

620363 Schott Type	nd 1.62004	ν d 36.3	nF−nC 0.01706
F2	ne 1.62409	ν e 36.1	nF'−nC' 0.01729

屈折率 Refractive Indices		
nt	1014.0	1.60283
nA'	768.2	1.60956
nr	706.5	1.61227
nC	656.3	1.61504
nC'	643.9	1.61583
nD	589.3	1.61990
nd	587.6	1.62004
ne	546.1	1.62409
nF	486.1	1.63210
nF'	480.0	1.63312
ng	435.8	1.64204
nG'	434.1	
nh	404.7	1.65067
ni	365.0	1.66607

分散式の常数 Constans of Dispersion Formula	
A0	2.5515548
A1	$-6.9399447 \times 10^{-3}$
A2	2.5283916×10^{-2}
A3	$-5.5950732 \times 10^{-5}$
A4	1.1911086×10^{-4}
A5	$-3.7234430 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	
$\Delta\theta$ C,A'	
$\Delta\theta$ g,d	
$\Delta\theta$ g,F	
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01221	0.00548	0.00500	0.00905
θ C,t	θ C,A'	θ d,C	θ e,C
0.716	0.321	0.293	0.530
ng−nd	ng−nF	nh−ng	ni−ng
0.02200	0.00994	0.00863	0.02403
θ g,d	θ g,F	θ h,g	θ i,g
1.290	0.583	0.506	1.409
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01300	0.00826	0.00903	0.03295
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.752	0.478	0.522	1.906

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 357 (4)	転移点 Tg (℃) Transformation Point 425
ビッカース硬さ Hv Vickers Hardness 377	屈伏点 At (℃) Yielding Point 488
磨耗度 Ha Abrasion 160	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 96
ヤング率 E (10^8N/m^2) Young's Modulus 553	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 224	
ポアソン比 σ Poisson Ratio 0.235	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 35/32
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.60
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.27 9	0.04 1
340	0.70 7	0.42 1
350	0.89 4	0.75 6
360	0.95 1	0.88 3
370	0.97 4	0.93 7
380	0.97 8	0.94 7
390	0.98 5	0.96 4
400	0.98 5	0.96 4
420	0.98 8	0.97 1
440	0.98 8	0.97 1
460	0.98 8	0.97 1
480	0.98 8	0.97 1
500	0.99 0	0.97 5
550	0.99 1	0.97 8
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 7	0.99 2
1500	0.99 5	0.98 9
2000	0.96 5	0.91 6

613369 Schott Type	nd 1.61293	ν d 36.9	nF−nC 0.01659
F3	ne 1.61686	ν e 36.7	nF'−nC' 0.01681

屈折率 Refractive Indices

nt	1014.0	1.59610
nA'	768.2	1.60271
nr	706.5	1.60535
nC	656.3	1.60805
nC'	643.9	1.60882
nD	589.3	1.61279
nd	587.6	1.61293
ne	546.1	1.61686
nF	486.1	1.62464
nF'	480.0	1.62563
ng	435.8	1.63428
nG'	434.1	
nh	404.7	1.64263
ni	365.0	1.65770

分散式の常数 Constans of Dispersion Formula

A0	2.5337577
A1	$-8.3915348 \times 10^{-3}$
A2	2.2367292×10^{-2}
A3	6.8951570×10^{-4}
A4	$-5.5312812 \times 10^{-6}$
A5	3.4500321×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0018
$\Delta\theta$ C,A'	
$\Delta\theta$ g,d	−0.0014
$\Delta\theta$ g,F	−0.0007
$\Delta\theta$ i,g	0.0078

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01195	0.00534	0.00488	0.00881
θ C,t	θ C,A'	θ d,C	θ e,C
0.720	0.322	0.294	0.531
ng−nd	ng−nF	nh−ng	ni−ng
0.02135	0.00964	0.00835	0.02342
θ g,d	θ g,F	θ h,g	θ i,g
1.287	0.581	0.503	1.412
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01272	0.00804	0.00877	0.03207
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.757	0.478	0.522	1.908

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 460 (5)	転移点 Tg (℃) Transformation Point 427
ビッカース硬さ Hv Vickers Hardness 478	屈伏点 At (℃) Yielding Point 479
磨耗度 Ha Abrasion 150	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 97
ヤング率 E (10^8N/m^2) Young's Modulus 571	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 233	
ポアソン比 σ Poisson Ratio 0.223	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 36/32
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.54
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310	0.03 7	
320	0.31 9	0.05 7
330	0.67 5	0.37 5
340	0.85 3	0.67 2
350	0.92 5	0.82 3
360	0.95 7	0.89 6
370	0.97 1	0.93 0
380	0.98 2	0.95 7
390	0.99 0	0.97 5
400	0.99 1	0.97 8
420	0.99 5	0.98 9
440	0.99 5	0.98 9
460	0.99 7	0.99 2
480	0.99 7	0.99 2
500	0.99 7	0.99 2
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 2	0.98 2
2000	0.94 0	0.85 7

617366 Schott Type	nd 1.61659	ν d 36.6	nF−nC 0.01684
F4	ne 1.62058	ν e 36.4	nF'−nC' 0.01707

屈折率 Refractive Indices

nt	1014.0	1.59954
nA'	768.2	1.60624
nr	706.5	1.60891
nC	656.3	1.61164
nC'	643.9	1.61242
nD	589.3	1.61644
nd	587.6	1.61659
ne	546.1	1.62058
nF	486.1	1.62848
nF'	480.0	1.62949
ng	435.8	1.63828
nG'	434.1	
nh	404.7	1.64679
ni	365.0	1.66215

分散式の常数 Constans of Dispersion Formula

A0	2.5446913
A1	$-8.5741031 \times 10^{-3}$
A2	2.2583001×10^{-2}
A3	7.3027237×10^{-4}
A4	$-6.5715324 \times 10^{-6}$
A5	3.5729091×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0015
$\Delta\theta$ C,A'	−0.0009
$\Delta\theta$ g,d	−0.0010
$\Delta\theta$ g,F	−0.0003
$\Delta\theta$ i,g	0.0110

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01210	0.00540	0.00495	0.00894
θ C,t	θ C,A'	θ d,C	θ e,C
0.719	0.321	0.294	0.531
ng−nd	ng−nF	nh−ng	ni−ng
0.02169	0.00980	0.00851	0.02387
θ g,d	θ g,F	θ h,g	θ i,g
1.288	0.582	0.505	1.417
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01288	0.00816	0.00891	0.03266
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.755	0.478	0.522	1.913

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 452 (5)	転移点 Tg (℃) Transformation Point 428
ビッカース硬さ Hv Vickers Hardness 483	屈伏点 At (℃) Yielding Point 469
磨耗度 Ha Abrasion 160	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 96
ヤング率 E (10^8N/m^2) Young's Modulus 562	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 230	
ポアソン比 σ Poisson Ratio 0.223	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 36/32
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.57
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310	0.02 7	
320	0.29 9	0.04 9
330	0.65 6	0.34 9
340	0.83 7	0.64 1
350	0.91 9	0.81 0
360	0.95 7	0.89 6
370	0.96 7	0.92 0
380	0.98 0	0.95 0
390	0.98 8	0.97 1
400	0.98 8	0.97 1
420	0.98 8	0.97 1
440	0.99 0	0.97 5
460	0.99 0	0.97 5
480	0.99 4	0.98 5
500	0.99 4	0.98 5
550	0.99 5	0.98 9
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 5	0.98 9
2000	0.95 5	0.88 0

603380 Schott Type	nd 1.60342	ν d 38.0	nF−nC 0.01587
F5	ne 1.60718	ν e 37.8	nF'−nC' 0.01608

屈折率 Refractive Indices

nt	1014.0	1.58721
nA'	768.2	1.59361
nr	706.5	1.59615
nC	656.3	1.59874
nC'	643.9	1.59948
nD	589.3	1.60328
nd	587.6	1.60342
ne	546.1	1.60718
nF	486.1	1.61461
nF'	480.0	1.61556
ng	435.8	1.62380
nG'	434.1	
nh	404.7	1.63175
ni	365.0	1.64609

分散式の常数 Constans of Dispersion Formula

A0	2.5069810
A1	$-8.6630204 \times 10^{-3}$
A2	2.1053341×10^{-2}
A3	7.4093220×10^{-4}
A4	$-2.1857303 \times 10^{-5}$
A5	4.1824557×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0030
$\Delta\theta$ C,A'	0.0001
$\Delta\theta$ g,d	−0.0020
$\Delta\theta$ g,F	−0.0011
$\Delta\theta$ i,g	0.0090

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01153	0.00513	0.00468	0.00844
θ C,t	θ C,A'	θ d,C	θ e,C
0.727	0.323	0.295	0.532
ng−nd	ng−nF	nh−ng	ni−ng
0.02038	0.00919	0.00795	0.02229
θ g,d	θ g,F	θ h,g	θ i,g
1.284	0.579	0.501	1.405
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01227	0.00770	0.00838	0.03053
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.763	0.479	0.521	1.899

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	410 (4)	転移点 Tg (℃) Transformation Point	428
ビッカース硬さ Hv Vickers Hardness	425	屈伏点 At (℃) Yielding Point	474
磨耗度 Ha Abrasion	150	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	97
ヤング率 E (10^8N/m^2) Young's Modulus	564	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	235		
ポアソン比 σ Poisson Ratio	0.201	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	35/32
耐酸性(粉末法) RA Acid Resistance	1	比重 S.g Specific Gravity	3.45
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.10 0	
330	0.49 3	0.17 1
340	0.77 9	0.53 6
350	0.89 4	0.75 6
360	0.94 6	0.87 0
370	0.97 1	0.93 0
380	0.97 4	0.93 7
390	0.98 5	0.96 4
400	0.98 8	0.97 1
420	0.98 8	0.97 1
440	0.98 8	0.97 1
460	0.99 1	0.97 8
480	0.99 1	0.97 8
500	0.99 4	0.98 5
550	0.99 4	0.98 5
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.95 3	0.88 7

596392 Schott Type	nd 1.59551	ν d 39.2	nF−nC 0.01519
F8	ne 1.59911	ν e 38.9	nF'−nC' 0.01539

屈折率 Refractive Indices		
nt	1014.0	1.57990
nA'	768.2	1.58610
nr	706.5	1.58854
nC	656.3	1.59102
nC'	643.9	1.59173
nD	589.3	1.59537
nd	587.6	1.59551
ne	546.1	1.59911
nF	486.1	1.60621
nF'	480.0	1.60712
ng	435.8	1.61498
nG'	434.1	
nh	404.7	1.62255
ni	365.0	1.63614

分散式の常数 Constans of Dispersion Formula	
A0	2.4849993
A1	$-8.8081747 \times 10^{-3}$
A2	2.0054510×10^{-2}
A3	6.8413811×10^{-4}
A4	$-1.5648635 \times 10^{-5}$
A5	3.3676638×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0030
$\Delta\theta$ C,A'	−0.0006
$\Delta\theta$ g,d	−0.0021
$\Delta\theta$ g,F	−0.0010
$\Delta\theta$ i,g	0.0067

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01112	0.00492	0.00449	0.00809
θ C,t	θ C,A'	θ d,C	θ e,C
0.732	0.324	0.296	0.533
ng−nd	ng−nF	nh−ng	ni−ng
0.01947	0.00877	0.00757	0.02116
θ g,d	θ g,F	θ h,g	θ i,g
1.282	0.577	0.498	1.393
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01183	0.00738	0.00801	0.02902
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.769	0.480	0.520	1.886

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 411 (4)	転移点 Tg (℃) Transformation Point 442
ビッカース硬さ Hv Vickers Hardness 415	屈伏点 At (℃) Yielding Point 490
磨耗度 Ha Abrasion 140	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 94
ヤング率 E (10^8N/m^2) Young's Modulus 596	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 244	
ポアソン比 σ Poisson Ratio 0.222	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 36/32
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.38
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.13 0	
330	0.48 2	0.16 1
340	0.73 6	0.46 4
350	0.86 0	0.68 6
360	0.92 2	0.81 7
370	0.95 4	0.89 0
380	0.95 9	0.90 3
390	0.97 4	0.93 7
400	0.98 2	0.95 7
420	0.98 5	0.96 4
440	0.98 5	0.96 4
460	0.98 8	0.97 1
480	0.98 8	0.97 1
500	0.99 0	0.97 5
550	0.99 4	0.98 5
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.95 3	0.88 7

626391 Schott Type	nd 1.62606	ν d 39.1	nF−nC 0.01601
BaSF1	ne 1.62986	ν e 38.8	nF'−nC' 0.01622

屈折率 Refractive Indices		
nt	1014.0	1.60968
nA'	768.2	1.61617
nr	706.5	1.61874
nC	656.3	1.62135
nC'	643.9	1.62209
nD	589.3	1.62592
nd	587.6	1.62606
ne	546.1	1.62986
nF	486.1	1.63736
nF'	480.0	1.63831
ng	435.8	1.64663
nG'	434.1	
nh	404.7	1.65466
ni	365.0	1.66900

分散式の常数 Constans of Dispersion Formula	
A0	2.5784155
A1	−9.0384934 ×10 $^{-3}$
A2	2.2066715 ×10 $^{-2}$
A3	4.8007095 ×10 $^{-4}$
A4	3.3201301 ×10 $^{-5}$
A5	5.1943083 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
Δ θ C,t	0.0003
Δ θ C,A'	−0.0009
Δ θ g,d	0.0008
Δ θ g,F	0.0005
Δ θ i,g	0.0101

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01167	0.00518	0.00471	0.00851
θ C,t	θ C,A'	θ d,C	θ e,C
0.729	0.324	0.294	0.532
ng−nd	ng−nF	nh−ng	ni−ng
0.02057	0.00927	0.00803	0.02237
θ g,d	θ g,F	θ h,g	θ i,g
1.285	0.579	0.502	1.397
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01241	0.00777	0.00845	0.03069
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.765	0.479	0.521	1.892

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 455 (5)	転移点 Tg (℃) Transformation Point 475
ビッカース硬さ Hv Vickers Hardness 473	屈伏点 At (℃) Yielding Point 527
磨耗度 Ha Abrasion 160	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 92
ヤング率 E (10^{8}N/m^2) Young's Modulus 646	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 262	
ポアソン比 σ Poisson Ratio 0.234	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 37/33
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.64
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.06 $_6$	
340	0.40 $_3$	0.10 $_3$
350	0.68 $_8$	0.39 $_3$
360	0.82 $_9$	0.62 $_5$
370	0.90 $_1$	0.77 $_1$
380	0.93 $_6$	0.84 $_8$
390	0.95 $_7$	0.89 $_6$
400	0.97 $_1$	0.93 $_0$
420	0.98 $_0$	0.95 $_0$
440	0.98 $_1$	0.95 $_4$
460	0.98 $_2$	0.95 $_7$
480	0.98 $_5$	0.96 $_4$
500	0.98 $_8$	0.97 $_1$
550	0.99 $_0$	0.97 $_5$
600	0.99 $_1$	0.97 $_8$
650	0.99 $_5$	0.98 $_9$
700	0.99 $_7$	0.99 $_2$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_5$	0.98 $_9$
1500	0.98 $_2$	0.95 $_7$
2000	0.95 $_1$	0.88 $_3$

664359 Schott Type	nd 1.66446	νd 35.9	nF−nC 0.01852
BaSF2	ne 1.66885	νe 35.6	nF'−nC' 0.01878

屈折率 Refractive Indices		
nt	1014.0	1.64587
nA'	768.2	1.65314
nr	706.5	1.65605
nC	656.3	1.65904
nC'	643.9	1.65989
nD	589.3	1.66430
nd	587.6	1.66446
ne	546.1	1.66885
nF	486.1	1.67756
nF'	480.0	1.67867
ng	435.8	1.68841
nG'	434.1	
nh	404.7	1.69786
ni	365.0	1.71505

分散式の常数 Constans of Dispersion Formula	
A0	2.6939664
A1	$-9.6825439 \times 10^{-3}$
A2	2.4521643×10^{-2}
A3	1.1226808×10^{-3}
A4	$-4.4848426 \times 10^{-5}$
A5	6.4258823×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	−0.0024
Δθ C,A'	−0.0021
Δθ g,d	0.0027
Δθ g,F	0.0025
Δθ i,g	0.0263

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01317	0.00590	0.00542	0.00981
θ C,t	θ C,A'	θ d,C	θ e,C
0.711	0.319	0.293	0.530
ng−nd	ng−nF	nh−ng	ni−ng
0.02395	0.01085	0.00945	0.02664
θ g,d	θ g,F	θ h,g	θ i,g
1.293	0.586	0.510	1.438
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01402	0.00896	0.00982	0.03638
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.747	0.477	0.523	1.937

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 417 (4)	転移点 Tg (℃) Transformation Point 498
ビッカース硬さ Hv Vickers Hardness 437	屈伏点 At (℃) Yielding Point 549
磨耗度 Ha Abrasion 190	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 86
ヤング率 E (10^8N/m^2) Young's Modulus 646	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 260	
ポアソン比 σ Poisson Ratio 0.242	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 39/34
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 3.95
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.06 3	
350	0.30 9	0.05 3
360	0.56 6	0.24 1
370	0.74 2	0.47 5
380	0.84 1	0.64 9
390	0.90 1	0.77 1
400	0.94 7	0.87 4
420	0.97 8	0.94 7
440	0.98 8	0.97 1
460	0.99 4	0.98 5
480	0.99 5	0.98 9
500	0.99 7	0.99 2
550	0.99 7	0.99 2
600	0.99 7	0.99 2
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 7	0.99 2
1500	0.98 8	0.97 1
2000	0.95 3	0.88 7

607402 Schott Type	nd 1.60717	ν d 40.2	nF−nC 0.01509
BaSF3	ne 1.61075	ν e 40.0	nF'−nC' 0.01528

屈折率 Refractive Indices		
nt	1014.0	1.59171
nA'	768.2	1.59781
nr	706.5	1.60024
nC	656.3	1.60271
nC'	643.9	1.60342
nD	589.3	1.60704
nd	587.6	1.60717
ne	546.1	1.61075
nF	486.1	1.61780
nF'	480.0	1.61870
ng	435.8	1.62650
nG'	434.1	
nh	404.7	1.63399
ni	365.0	1.64736

分散式の常数 Constans of Dispersion Formula	
A0	2.5200247
A1	$-7.4588605 \times 10^{-3}$
A2	2.1468520×10^{-2}
A3	2.8195140×10^{-4}
A4	4.0462250×10^{-5}
A5	2.0210430×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0049
$\Delta\theta$ C,A'	−0.0010
$\Delta\theta$ g,d	−0.0008
$\Delta\theta$ g,F	−0.0003
$\Delta\theta$ i,g	0.0040

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01100	0.00490	0.00446	0.00804
θ C,t	θ C,A'	θ d,C	θ e,C
0.729	0.325	0.296	0.533
ng−nd	ng−nF	nh−ng	ni−ng
0.01933	0.00870	0.00749	0.02086
θ g,d	θ g,F	θ h,g	θ i,g
1.281	0.577	0.496	1.382
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01171	0.00733	0.00795	0.02866
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.766	0.480	0.520	1.876

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 430 (4)	転移点 Tg (℃) Transformation Point 472
ビッカース硬さ Hv Vickers Hardness 425	屈伏点 At (℃) Yielding Point 525
磨耗度 Ha Abrasion 160	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 90
ヤング率 E (10^8N/m^2) Young's Modulus 623	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 253	
ポアソン比 σ Poisson Ratio 0.232	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 36/32
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.48
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.03 2	
330	0.25 1	0.03 1
340	0.61 5	0.29 7
350	0.81 9	0.60 8
360	0.90 4	0.77 7
370	0.94 8	0.87 7
380	0.96 4	0.91 3
390	0.97 8	0.94 7
400	0.98 5	0.96 4
420	0.99 0	0.97 5
440	0.99 0	0.97 5
460	0.99 1	0.97 8
480	0.99 4	0.98 5
500	0.99 5	0.98 9
550	0.99 5	0.98 9
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.96 1	0.90 6

651383 Schott Type	nd 1.65128	ν d 38.3	nF−nC 0.01699
BaSF4	ne 1.65531	ν e 38.0	nF'−nC' 0.01723

屈折率 Refractive Indices		
nt	1014.0	1.63416
nA'	768.2	1.64088
nr	706.5	1.64355
nC	656.3	1.64629
nC'	643.9	1.64707
nD	589.3	1.65113
nd	587.6	1.65128
ne	546.1	1.65531
nF	486.1	1.66328
nF'	480.0	1.66430
ng	435.8	1.67311
nG'	434.1	
nh	404.7	1.68159
ni	365.0	1.69693

分散式の常数 Constans of Dispersion Formula	
A0	2.6619183
A1	$-1.1237717 \times 10^{-2}$
A2	1.8669163×10^{-2}
A3	2.2766748×10^{-3}
A4	$-2.2823234 \times 10^{-4}$
A5	1.4897896×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0111
$\Delta\theta$ C,A'	−0.0051
$\Delta\theta$ g,d	−0.0007
$\Delta\theta$ g,F	−0.0011
$\Delta\theta$ i,g	0.0089

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01213	0.00541	0.00499	0.00902
θ C,t	θ C,A'	θ d,C	θ e,C
0.714	0.318	0.294	0.531
ng−nd	ng−nF	nh−ng	ni−ng
0.02183	0.00983	0.00848	0.02382
θ g,d	θ g,F	θ h,g	θ i,g
1.285	0.579	0.499	1.402
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01291	0.00824	0.00899	0.03263
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.749	0.478	0.522	1.894

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 407 (4)	転移点 Tg (℃) Transformation Point 477
ビッカース硬さ Hv Vickers Hardness 413	屈伏点 At (℃) Yielding Point 533
磨耗度 Ha Abrasion 210	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 100
ヤング率 E (10^8N/m^2) Young's Modulus 648	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 258	
ポアソン比 σ Poisson Ratio 0.256	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 39/33
耐酸性(粉末法) RA Acid Resistance 2	比重 S.g Specific Gravity 3.91
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.03 7	
340	0.32 4	0.06 0
350	0.58 8	0.26 5
360	0.72 9	0.45 4
370	0.81 2	0.59 5
380	0.86 7	0.70 0
390	0.90 7	0.78 3
400	0.93 6	0.84 8
420	0.96 7	0.92 0
440	0.98 1	0.95 4
460	0.98 5	0.96 4
480	0.98 8	0.97 1
500	0.99 0	0.97 5
550	0.99 4	0.98 5
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 7	0.99 2
2000	0.96 0	0.90 3

651383 Schott Type K-BaSF4	nd	1.65128	ν d	38.3	nF-nC 0.01699
	ne	1.65531	ν e	38.1	nF'-nC' 0.01722

屈折率 Refractive Indices		
nt	1014.0	1.63373
nA'	768.2	1.64079
nr	706.5	1.64351
nC	656.3	1.64628
nC'	643.9	1.64706
nD	589.3	1.65113
nd	587.6	1.65128
ne	546.1	1.65531
nF	486.1	1.66327
nF'	480.0	1.66428
ng	435.8	1.67310
nG'	434.1	
nh	404.7	1.68161
ni	365.0	1.69717

分散式の常数 Constans of Dispersion Formula	
A0	2.6658188
A1	$-1.5222706 \times 10^{-2}$
A2	1.7138042×10^{-2}
A3	2.6165294×10^{-3}
A4	$-2.7592859 \times 10^{-4}$
A5	1.8035723×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0138
$\Delta\theta$ C,A'	-0.0004
$\Delta\theta$ g,d	-0.0014
$\Delta\theta$ g,F	-0.0012
$\Delta\theta$ i,g	0.0234

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.01255	0.00549	0.00500	0.00903
θ C,t	θ C,A'	θ d,C	θ e,C
0.739	0.323	0.294	0.531
ng-nd	ng-nF	nh-ng	ni-ng
0.02182	0.00983	0.00851	0.02407
θ g,d	θ g,F	θ h,g	θ i,g
1.284	0.579	0.501	1.417
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.01333	0.00825	0.00897	0.03289
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.774	0.479	0.521	1.910

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	586 (6)	転移点 Tg (℃) Transformation Point	513
ビッカース硬さ Hv Vickers Hardness	590	屈伏点 At (℃) Yielding Point	553
磨耗度 Ha Abrasion	154	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃)	92
ヤング率 E (10^8N/m^2) Young's Modulus	887	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	362		
ポアソン比 σ Poisson Ratio	0.223	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	39/35
耐酸性(粉末法) RA Acid Resistance	1	比重 S.g Specific Gravity	2.96
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.00 1	
350	0.10 3	0.00 3
360	0.46 4	0.14 6
370	0.73 8	0.46 8
380	0.86 0	0.68 7
390	0.91 9	0.81 0
400	0.94 8	0.87 6
420	0.97 1	0.93 1
440	0.98 1	0.95 3
460	0.98 5	0.96 4
480	0.98 9	0.97 4
500	0.99 2	0.98 1
550	0.99 8	0.99 5
600	0.99 8	0.99 5
650	0.99 8	0.99 6
700	0.99 8	0.99 7
800	0.99 8	0.99 7
1060	0.99 8	0.99 7
1500	0.99 8	0.99 7
2000	0.98 3	0.96 0

603425 Schott Type	nd 1.60323	ν d 42.5	nF−nC 0.01419
BaSF5	ne 1.60660	ν e 42.2	nF'−nC' 0.01437

屈折率 Refractive Indices

nt	1014.0	1.58837
nA'	768.2	1.59439
nr	706.5	1.59669
nC	656.3	1.59903
nC'	643.9	1.59969
nD	589.3	1.60311
nd	587.6	1.60323
ne	546.1	1.60660
nF	486.1	1.61322
nF'	480.0	1.61406
ng	435.8	1.62134
nG'	434.1	
nh	404.7	1.62831
ni	365.0	

分散式の常数 Constans of Dispersion Formula

A0	2.5185300
A1	$-1.1979180 \times 10^{-2}$
A2	1.5787006×10^{-2}
A3	1.5614544×10^{-3}
A4	$-1.4654833 \times 10^{-4}$
A5	9.7463473×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0067
$\Delta\theta$ C,A'	−0.0014
$\Delta\theta$ g,d	−0.0010
$\Delta\theta$ g,F	−0.0012
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01066	0.00464	0.00420	0.00757
θ C,t	θ C,A'	θ d,C	θ e,C
0.751	0.327	0.296	0.533
ng−nd	ng−nF	nh−ng	ni−ng
0.01811	0.00812	0.00697	
θ g,d	θ g,F	θ h,g	θ i,g
1.276	0.572	0.491	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01132	0.00691	0.00746	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.788	0.481	0.519	

機械的性質 Mechanical Properties

ヌープ硬さ Hk
Knoop Hardness 469 (5)

ビッカース硬さ Hv
Vickers Hardness 446

磨耗度 Ha
Abrasion 150

ヤング率 E (10^8N/m^2)
Young's Modulus 745

剛性率 G (10^8N/m^2)
Modulus of Rigidity 302

ポアソン比 σ
Poisson Ratio 0.233

化学的性質 Chemical Properties

耐水性(粉末法) RW
Water Resistance 1

耐酸性(粉末法) RA
Acid Resistance 1

耐候性(表面法) DW
Weather Resistance 1

熱的性質 Thermal Properties

転移点 Tg (℃)
Transformation Point 473

屈伏点 At (℃)
Yielding Point 521

線膨張係数 $\alpha \times 10^{-7}$
Thermal Expansion
(100−300℃) 96

備考 Remark s

その他 Other Properties

泡 B
Bubbles

着色度 C
Color Degree 38/35

比重 S.g
Specific Gravity 3.18

脈理 S
Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350	0.06 6	
360	0.40 9	0.10 7
370	0.72 7	0.45 0
380	0.88 0	0.72 8
390	0.94 8	0.87 7
400	0.97 4	0.93 7
420	0.98 5	0.96 4
440	0.99 0	0.97 5
460	0.99 4	0.98 5
480	0.99 5	0.98 9
500	0.99 5	0.98 9
550	0.99 5	0.98 9
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 7	0.99 2
1500	0.99 0	0.97 5
2000	0.96 8	0.92 3

668419 Schott Type	nd 1.66755	ν d 41.9	nF−nC 0.01594
BaSF6	ne 1.67133	ν e 41.6	nF'−nC' 0.01614

屈折率 Refractive Indices		
nt	1014.0	1.65110
nA'	768.2	1.65764
nr	706.5	1.66022
nC	656.3	1.66283
nC'	643.9	1.66358
nD	589.3	1.66741
nd	587.6	1.66755
ne	546.1	1.67133
nF	486.1	1.67877
nF'	480.0	1.67972
ng	435.8	1.68793
nG'	434.1	
nh	404.7	1.69580
ni	365.0	1.70979

分散式の常数 Constans of Dispersion Formula	
A0	2.7133650
A1	$-9.5447373 \times 10^{-3}$
A2	2.2686918×10^{-2}
A3	5.2419627×10^{-4}
A4	1.8835522×10^{-5}
A5	1.1090148×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0057
$\Delta\theta$ C,A'	−0.0020
$\Delta\theta$ g,d	
$\Delta\theta$ g,F	0.0002
$\Delta\theta$ i,g	0.0058

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01173	0.00519	0.00472	0.00850
θ C,t	θ C,A'	θ d,C	θ e,C
0.736	0.326	0.296	0.533
ng−nd	ng−nF	nh−ng	ni−ng
0.02038	0.00916	0.00787	0.02186
θ g,d	θ g,F	θ h,g	θ i,g
1.279	0.575	0.494	1.371
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01248	0.00775	0.00839	0.03007
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.773	0.480	0.520	1.863

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 520 (5)	転移点 Tg (℃) Transformation Point 584
ビッカース硬さ Hv Vickers Hardness 530	屈伏点 At (℃) Yielding Point 636
磨耗度 Ha Abrasion 180	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 80
ヤング率 E (10^8N/m^2) Young's Modulus 769	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 304	
ポアソン比 σ Poisson Ratio 0.265	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 39/34
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 3.88
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.13 0	
350	0.45 9	0.14 2
360	0.69 7	0.40 6
370	0.82 6	0.62 0
380	0.89 4	0.75 6
390	0.93 3	0.84 2
400	0.95 7	0.89 6
420	0.97 5	0.94 0
440	0.98 5	0.96 4
460	0.99 1	0.97 8
480	0.99 5	0.98 9
500	0.99 5	0.98 9
550	0.99 7	0.99 2
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 7	0.99 2
2000	0.98 8	0.97 1

702411 Schott Type	nd 1.70154	ν d 41.1	nF−nC 0.01705
BaSF7	ne 1.70559	ν e 40.9	nF'−nC' 0.01725

屈折率 Refractive Indices		
nt	1014.0	1.68393
nA'	768.2	1.69092
nr	706.5	1.69368
nC	656.3	1.69648
nC'	643.9	1.69729
nD	589.3	1.70139
nd	587.6	1.70154
ne	546.1	1.70559
nF	486.1	1.71353
nF'	480.0	1.71454
ng	435.8	1.72330
nG'	434.1	
nh	404.7	1.73167
ni	365.0	1.74662

分散式の常数 Constans of Dispersion Formula	
A0	2.8206362
A1	−9.7755527 ×10 $^{-3}$
A2	2.5187638 ×10 $^{-2}$
A3	5.5949408 ×10 $^{-4}$
A4	5.6712448 ×10 $^{-6}$
A5	2.6424639 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δ θ C,t	−0.0021
Δ θ C,A'	−0.0007
Δ θ g,d	−0.0037
Δ θ g,F	−0.0025
Δ θ i,g	−0.0036

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01255	0.00556	0.00506	0.00911
θ C,t	θ C,A'	θ d,C	θ e,C
0.736	0.326	0.297	0.534
ng−nd	ng−nF	nh−ng	ni−ng
0.02176	0.00977	0.00837	0.02332
θ g,d	θ g,F	θ h,g	θ i,g
1.276	0.573	0.491	1.368
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01336	0.00830	0.00895	0.03208
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.774	0.481	0.519	1.860

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 514 (5)	転移点 Tg (℃) Transformation Point 608
ビッカース硬さ Hv Vickers Hardness 536	屈伏点 At (℃) Yielding Point 656
磨耗度 Ha Abrasion 160	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 76
ヤング率 E (10^{8}N/m^2) Young's Modulus 840	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 331	
ポアソン比 σ Poisson Ratio 0.270	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 40/34
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 4.07
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.02 $_2$	
350	0.25 $_1$	0.03 $_1$
360	0.55 $_2$	0.22 $_6$
370	0.75 $_3$	0.49 $_2$
380	0.85 $_0$	0.66 $_7$
390	0.90 $_5$	0.78 $_0$
400	0.93 $_9$	0.85 $_4$
420	0.96 $_8$	0.92 $_3$
440	0.98 $_1$	0.95 $_4$
460	0.98 $_8$	0.97 $_1$
480	0.99 $_0$	0.97 $_5$
500	0.99 $_5$	0.98 $_9$
550	0.99 $_7$	0.99 $_2$
600	0.99 $_7$	0.99 $_2$
650	0.99 $_7$	0.99 $_2$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_7$	0.99 $_2$
2000	0.98 $_2$	0.95 $_7$

723380 Schott Type	nd 1.72342	ν d 38.0	nF−nC 0.01905
BaSF8	ne 1.72794	ν e 37.7	nF'−nC' 0.01930

屈折率 Refractive Indices		
nt	1014.0	1.70397
nA'	768.2	1.71166
nr	706.5	1.71470
nC	656.3	1.71781
nC'	643.9	1.71869
nD	589.3	1.72325
nd	587.6	1.72342
ne	546.1	1.72794
nF	486.1	1.73686
nF'	480.0	1.73799
ng	435.8	1.74787
nG'	434.1	
nh	404.7	1.75738
ni	365.0	1.77454

分散式の常数 Constans of Dispersion Formula	
A0	2.8897009
A1	$-1.2081838 \times 10^{-2}$
A2	2.5663767×10^{-2}
A3	1.4303905×10^{-3}
A4	$-9.4809020 \times 10^{-5}$
A5	8.7572103×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0032
$\Delta\theta$ C,A'	−0.0003
$\Delta\theta$ g,d	−0.0028
$\Delta\theta$ g,F	−0.0023
$\Delta\theta$ i,g	0.0041

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01384	0.00615	0.00561	0.01013
θ C,t	θ C,A'	θ d,C	θ e,C
0.727	0.323	0.294	0.532
ng−nd	ng−nF	nh−ng	ni−ng
0.02445	0.01101	0.00951	0.02667
θ g,d	θ g,F	θ h,g	θ i,g
1.283	0.578	0.499	1.400
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01472	0.00925	0.01005	0.03655
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.763	0.479	0.521	1.894

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 537 (5)	転移点 Tg (℃) Transformation Point 560
ビッカース硬さ Hv Vickers Hardness 542	屈伏点 At (℃) Yielding Point 614
磨耗度 Ha Abrasion 170	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 74
ヤング率 E (10^8N/m^2) Young's Modulus 820	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 322	
ポアソン比 σ Poisson Ratio 0.274	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 41/34
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 4.24
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.02 1	
350	0.15 8	
360	0.43 0	0.12 1
370	0.63 1	0.31 7
380	0.76 2	0.50 7
390	0.84 6	0.65 9
400	0.89 7	0.76 2
420	0.95 0	0.88 0
440	0.97 4	0.93 7
460	0.98 2	0.95 7
480	0.98 8	0.97 1
500	0.99 4	0.98 5
550	0.99 5	0.98 9
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 5	0.98 9
1500	0.98 5	0.96 4
2000	0.96 7	0.92 0

650393 Schott Type	nd 1.65016	ν d 39.3	nF−nC 0.01654
BaSF10	ne 1.65408	ν e 39.0	nF'−nC' 0.01676

屈折率 Refractive Indices		
nt	1014.0	1.63325
nA'	768.2	1.63996
nr	706.5	1.64260
nC	656.3	1.64529
nC'	643.9	1.64606
nD	589.3	1.65001
nd	587.6	1.65016
ne	546.1	1.65408
nF	486.1	1.66183
nF'	480.0	1.66282
ng	435.8	1.67141
nG'	434.1	
nh	404.7	1.67968
ni	365.0	1.69457

分散式の常数 Constans of Dispersion Formula	
A0	2.6577046
A1	$-1.1063240 \times 10^{-2}$
A2	2.0536681×10^{-2}
A3	1.3508800×10^{-3}
A4	$-9.0400035 \times 10^{-5}$
A5	7.3492798×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0016
$\Delta\theta$ C,A'	−0.0024
$\Delta\theta$ g,d	0.0011
$\Delta\theta$ g,F	0.0010
$\Delta\theta$ i,g	0.0147

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01204	0.00533	0.00487	0.00879
θ C,t	θ C,A'	θ d,C	θ e,C
0.728	0.322	0.294	0.531
ng−nd	ng−nF	nh−ng	ni−ng
0.02125	0.00958	0.00827	0.02316
θ g,d	θ g,F	θ h,g	θ i,g
1.285	0.579	0.500	1.400
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01281	0.00802	0.00874	0.03175
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.764	0.479	0.521	1.894

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	539 (5)	転移点 Tg (℃) Transformation Point	529
ビッカース硬さ Hv Vickers Hardness	548	屈伏点 At (℃) Yielding Point	587
磨耗度 Ha Abrasion	180	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	86
ヤング率 E (10^8N/m^2) Young's Modulus	650	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	260		
ポアソン比 σ Poisson Ratio	0.250	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	38/33
耐酸性(粉末法) RA Acid Resistance	2	比重 S.g Specific Gravity	3.92
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.02 2	
340	0.27 9	0.04 1
350	0.61 9	0.30 1
360	0.78 3	0.54 3
370	0.86 7	0.70 0
380	0.91 1	0.79 2
390	0.93 9	0.85 4
400	0.95 7	0.89 6
420	0.97 5	0.94 0
440	0.98 2	0.95 7
460	0.98 8	0.97 1
480	0.98 8	0.97 1
500	0.99 2	0.98 2
550	0.99 5	0.98 9
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.98 5	0.96 4

670392 Schott Type **BaSF12**	nd 1.66998	ν d 39.2	nF−nC 0.01709
	ne 1.67403	ν e 38.9	nF'−nC' 0.01731

屈折率 Refractive Indices		
nt	1014.0	1.65262
nA'	768.2	1.65944
nr	706.5	1.66216
nC	656.3	1.66495
nC'	643.9	1.66574
nD	589.3	1.66983
nd	587.6	1.66998
ne	546.1	1.67403
nF	486.1	1.68204
nF'	480.0	1.68305
ng	435.8	1.69194
nG'	434.1	
nh	404.7	1.70052
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	2.7157255
A1	$-8.5850692 \times 10^{-3}$
A2	2.4299970×10^{-2}
A3	6.5374795×10^{-4}
A4	$-2.6114074 \times 10^{-6}$
A5	3.7821413×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0076
$\Delta\theta$ C,A'	−0.0021
$\Delta\theta$ g,d	0.0011
$\Delta\theta$ g,F	0.0009
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01233	0.00551	0.00503	0.00908
θ C,t	θ C,A'	θ d,C	θ e,C
0.721	0.322	0.294	0.531
ng−nd	ng−nF	nh−ng	ni−ng
0.02196	0.00990	0.00858	
θ g,d	θ g,F	θ h,g	θ i,g
1.285	0.579	0.502	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01312	0.00829	0.00902	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.758	0.479	0.521	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 574 (6)	転移点 Tg (℃) Transformation Point 546
ビッカース硬さ Hv Vickers Hardness 572	屈伏点 At (℃) Yielding Point 606
磨耗度 Ha Abrasion 190	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 87
ヤング率 E (10^8N/m^2) Young's Modulus 745	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 295	
ポアソン比 σ Poisson Ratio 0.261	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 2	着色度 C Color Degree 40/35
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 3.86
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350	0.02 7	
360	0.25 5	0.03 3
370	0.57 6	0.25 2
380	0.77 5	0.52 9
390	0.87 3	0.71 4
400	0.92 2	0.81 7
420	0.96 0	0.90 3
440	0.97 4	0.93 7
460	0.98 1	0.95 4
480	0.98 2	0.95 7
500	0.98 5	0.96 4
550	0.99 0	0.97 5
600	0.99 2	0.98 2
650	0.99 4	0.98 5
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.98 2	0.95 7

717295 Schott Type	nd 1.71736	ν d 29.5	nF−nC 0.02431
SF1	ne 1.72311	ν e 29.3	nF'−nC' 0.02469

屈折率 Refractive Indices

nt	1014.0	1.69373
nA'	768.2	1.70275
nr	706.5	1.70647
nC	656.3	1.71031
nC'	643.9	1.71141
nD	589.3	1.71715
nd	587.6	1.71736
ne	546.1	1.72311
nF	486.1	1.73462
nF'	480.0	1.73610
ng	435.8	1.74916
nG'	434.1	
nh	404.7	1.76200
ni	365.0	1.78586

分散式の常数 Constans of Dispersion Formula

A0	2.8460693
A1	$-9.8036142 \times 10^{-3}$
A2	3.1907443×10^{-2}
A3	1.8847460×10^{-3}
A4	$-1.0548754 \times 10^{-4}$
A5	1.3701420×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	−0.0018
$\Delta\theta$ C,A'	−0.0023
$\Delta\theta$ g,d	0.0049
$\Delta\theta$ g,F	0.0053
$\Delta\theta$ i,g	0.0481

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01658	0.00756	0.00705	0.01280
θ C,t	θ C,A'	θ d,C	θ e,C
0.682	0.311	0.290	0.527
ng−nd	ng−nF	nh−ng	ni−ng
0.03180	0.01454	0.01284	0.03670
θ g,d	θ g,F	θ h,g	θ i,g
1.308	0.598	0.528	1.510
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01768	0.01170	0.01299	0.04976
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.716	0.474	0.526	2.015

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 351 (4)	転移点 Tg (℃) Transformation Point 432
ビッカース硬さ Hv Vickers Hardness 366	屈伏点 At (℃) Yielding Point 475
磨耗度 Ha Abrasion 190	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 89
ヤング率 E (10^8N/m^2) Young's Modulus 547	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 221	
ポアソン比 σ Poisson Ratio 0.237	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 39/34
耐酸性(粉末法) RA Acid Resistance 2	比重 S.g Specific Gravity 4.46
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.12 9	0.01 0
350	0.38 9	0.13 0
360	0.68 0	0.35 0
370	0.79 9	0.58 0
380	0.88 5	0.73 2
390	0.93 8	0.83 1
400	0.95 3	0.90 0
420	0.98 2	0.95 7
440	0.98 4	0.95 7
460	0.98 5	0.96 4
480	0.98 8	0.97 1
500	0.99 0	0.97 5
550	0.99 4	0.98 5
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.98 2	0.95 7

648339 Schott Type	nd 1.64769	ν d 33.9	nF−nC 0.01912
SF2	ne 1.65222	ν e 33.6	nF'−nC' 0.01939

屈折率 Refractive Indices

nt	1014.0	1.62863
nA'	768.2	1.63604
nr	706.5	1.63903
nC	656.3	1.64210
nC'	643.9	1.64298
nD	589.3	1.64753
nd	587.6	1.64769
ne	546.1	1.65222
nF	486.1	1.66122
nF'	480.0	1.66237
ng	435.8	1.67247
nG'	434.1	
nh	404.7	1.68230
ni	365.0	1.70026

分散式の常数 Constans of Dispersion Formula

A0	2.6357555
A1	$-8.8369978 \times 10^{-3}$
A2	2.5530657×10^{-2}
A3	1.0085256×10^{-3}
A4	$-2.7211205 \times 10^{-5}$
A5	6.1064321×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0003
$\Delta\theta$ C,A'	−0.0014
$\Delta\theta$ g,d	0.0015
$\Delta\theta$ g,F	0.0021
$\Delta\theta$ i,g	0.0258

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01347	0.00606	0.00559	0.01012
θ C,t	θ C,A'	θ d,C	θ e,C
0.704	0.317	0.292	0.529
ng−nd	ng−nF	nh−ng	ni−ng
0.02478	0.01125	0.00983	0.02779
θ g,d	θ g,F	θ h,g	θ i,g
1.296	0.588	0.514	1.453
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01435	0.00924	0.01015	0.03789
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.740	0.477	0.523	1.954

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 369 (4)	転移点 Tg (℃) Transformation Point 438
ビッカース硬さ Hv Vickers Hardness 380	屈伏点 At (℃) Yielding Point 488
磨耗度 Ha Abrasion 170	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 96
ヤング率 E (10^8N/m^2) Young's Modulus 535	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 217	
ポアソン比 σ Poisson Ratio 0.232	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 37/33
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.84
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.04 2	
340	0.37 6	0.08 7
350	0.70 1	0.41 1
360	0.86 0	0.68 6
370	0.93 2	0.83 8
380	0.95 4	0.89 0
390	0.97 5	0.94 0
400	0.98 2	0.95 7
420	0.99 0	0.97 5
440	0.99 1	0.97 8
460	0.99 2	0.98 2
480	0.99 4	0.98 5
500	0.99 4	0.98 5
550	0.99 5	0.98 9
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 5	0.98 9
1500	0.98 8	0.97 1
2000	0.94 0	0.85 7

740282 Schott Type	nd 1.74000	ν d 28.2	nF−nC 0.02627
SF3	ne 1.74620	ν e 28.0	nF'−nC' 0.02668

屈折率 Refractive Indices		
nt	1014.0	1.71468
nA'	768.2	1.72431
nr	706.5	1.72829
nC	656.3	1.73241
nC'	643.9	1.73360
nD	589.3	1.73977
nd	587.6	1.74000
ne	546.1	1.74620
nF	486.1	1.75868
nF'	480.0	1.76028
ng	435.8	1.77448
nG'	434.1	
nh	404.7	1.78851
ni	365.0	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01773	0.00810	0.00759	0.01379
θ C,t	θ C,A'	θ d,C	θ e,C
0.675	0.308	0.289	0.525
ng−nd	ng−nF	nh−ng	ni−ng
0.03448	0.01580	0.01403	
θ g,d	θ g,F	θ h,g	θ i,g
1.313	0.601	0.534	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01892	0.01260	0.01408	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.709	0.472	0.528	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360	0.15 4	
370	0.50 5	0.18 1
380	0.75 9	0.50 3
390	0.88 0	0.72 8
400	0.93 4	0.84 5
420	0.97 1	0.93 0
440	0.98 2	0.95 7
460	0.99 0	0.97 5
480	0.99 4	0.98 5
500	0.99 5	0.98 9
550	0.99 7	0.99 2
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.98 2	0.95 7
1500	0.97 1	0.93 0
2000	0.94 3	0.86 4

分散式の常数 Constans of Dispersion Formula	
A0	2.9180590
A1	−1.1559536 ×10 −2
A2	3.2369401 ×10 −2
A3	2.8002688 ×10 −3
A4	−2.1470814 ×10 −4
A5	2.1127003 ×10 −5

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0027
$\Delta\theta$ C,A'	−0.0034
$\Delta\theta$ g,d	0.0067
$\Delta\theta$ g,F	0.0066
$\Delta\theta$ i,g	

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	372 (4)	転移点 Tg (℃) Transformation Point	437
ビッカース硬さ Hv Vickers Hardness	366	屈伏点 At (℃) Yielding Point	472
磨耗度 Ha Abrasion	200	線膨張係数 $\alpha\times10^{-7}$ Thermal Expansion (100−300℃)	89
ヤング率 E (10^8N/m^2) Young's Modulus	555	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	225		
ポアソン比 σ Poisson Ratio	0.236	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	40/36
耐酸性(粉末法) RA Acid Resistance	2	比重 S.g Specific Gravity	4.63
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

755275 Schott Type	nd 1.75520	ν d 27.5	nF−nC 0.02743
SF4	ne 1.76168	ν e 27.3	nF'−nC' 0.02788

屈折率 Refractive Indices

nt	1014.0	1.72886
nA'	768.2	1.73883
nr	706.5	1.74298
nC	656.3	1.74728
nC'	643.9	1.74851
nD	589.3	1.75496
nd	587.6	1.75520
ne	546.1	1.76168
nF	486.1	1.77471
nF'	480.0	1.77639
ng	435.8	1.79126
nG'	434.1	
nh	404.7	1.80598
ni	365.0	

分散式の常数 Constans of Dispersion Formula

A0	2.9612860
A1	$-9.7184593 \times 10^{-3}$
A2	3.6746182×10^{-2}
A3	2.1217619×10^{-3}
A4	$-1.0682716 \times 10^{-4}$
A5	1.6287508×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	−0.0031
$\Delta\theta$ C,A'	−0.0030
$\Delta\theta$ g,d	0.0075
$\Delta\theta$ g,F	0.0076
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01842	0.00845	0.00792	0.01440
θ C,t	θ C,A'	θ d,C	θ e,C
0.672	0.308	0.289	0.525
ng−nd	ng−nF	nh−ng	ni−ng
0.03606	0.01655	0.01472	
θ g,d	θ g,F	θ h,g	θ i,g
1.315	0.603	0.537	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01965	0.01317	0.01471	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.705	0.472	0.528	

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	340 (3)
ビッカース硬さ Hv Vickers Hardness	339
磨耗度 Ha Abrasion	190
ヤング率 E (10^8N/m^2) Young's Modulus	552
剛性率 G (10^8N/m^2) Modulus of Rigidity	223
ポアソン比 σ Poisson Ratio	0.238

化学的性質 Chemical Properties

耐水性(粉末法) RW Water Resistance	1
耐酸性(粉末法) RA Acid Resistance	2
耐候性(表面法) DW Weather Resistance	1

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	437
屈伏点 At (℃) Yielding Point	476
線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	85
備考 Remark s	

その他 Other Properties

泡 B Bubbles	
着色度 C Color Degree	41/35
比重 S.g Specific Gravity	4.78
脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350	0.01 3	
360	0.13 5	
370	0.52 6	0.20 3
380	0.76 4	0.51 1
390	0.85 2	0.67 0
400	0.90 4	0.77 7
420	0.96 0	0.90 3
440	0.97 7	0.94 4
460	0.98 8	0.97 1
480	0.99 1	0.97 8
500	0.99 5	0.98 9
550	0.99 7	0.99 2
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 0	0.97 5
1500	0.97 8	0.94 7
2000	0.96 1	0.90 6

755275 Schott Type	nd 1.75520	ν d 27.5	nF−nC 0.02743
SF4W	ne 1.76168	ν e 27.3	nF'−nC' 0.02788

屈折率 Refractive Indices		
nt	1014.0	1.72886
nA'	768.2	1.73883
nr	706.5	1.74298
nC	656.3	1.74728
nC'	643.9	1.74851
nD	589.3	1.75496
nd	587.6	1.75520
ne	546.1	1.76168
nF	486.1	1.77471
nF'	480.0	1.77639
ng	435.8	1.79126
nG'	434.1	
nh	404.7	1.80598
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	2.9612860
A1	$-9.7184593 \times 10^{-3}$
A2	3.6746182×10^{-2}
A3	2.1217619×10^{-3}
A4	$-1.0682716 \times 10^{-4}$
A5	1.6287508×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0031
$\Delta\theta$ C,A'	−0.0030
$\Delta\theta$ g,d	0.0075
$\Delta\theta$ g,F	0.0076
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01842	0.00845	0.00792	0.01440
θ C,t	θ C,A'	θ d,C	θ e,C
0.672	0.308	0.289	0.525
ng−nd	ng−nF	nh−ng	ni−ng
0.03606	0.01655	0.01472	
θ g,d	θ g,F	θ h,g	θ i,g
1.315	0.603	0.537	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01965	0.01317	0.01471	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.705	0.472	0.528	

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	340 (3)	転移点 Tg (℃) Transformation Point	437
ビッカース硬さ Hv Vickers Hardness	339	屈伏点 At (℃) Yielding Point	476
磨耗度 Ha Abrasion	190	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion	
ヤング率 E (10^8N/m^2) Young's Modulus	552	(100−300℃)	85
剛性率 G (10^8N/m^2) Modulus of Rigidity	223	備考 Remark s	
ポアソン比 σ Poisson Ratio	0.238	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	40/35
耐酸性(粉末法) RA Acid Resistance	2	比重 S.g Specific Gravity	4.78
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350	0.01 3	
360	0.13 8	
370	0.56 4	0.23 9
380	0.78 8	0.55 2
390	0.89 0	0.74 8
400	0.93 9	0.85 4
420	0.97 5	0.94 0
440	0.98 5	0.96 4
460	0.99 1	0.97 8
480	0.99 5	0.98 9
500	0.99 5	0.98 9
550	0.99 7	0.99 2
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 0	0.97 5
1500	0.97 8	0.94 7
2000	0.96 1	0.90 6

673322 Schott Type	nd 1.67270	ν d 32.2	nF−nC 0.02089
SF5	ne 1.67764	ν e 32.0	nF'−nC' 0.02120

屈折率 Refractive Indices		
nt	1014.0	1.65208
nA'	768.2	1.66004
nr	706.5	1.66328
nC	656.3	1.66661
nC'	643.9	1.66756
nD	589.3	1.67251
nd	587.6	1.67270
ne	546.1	1.67764
nF	486.1	1.68750
nF'	480.0	1.68876
ng	435.8	1.69986
nG'	434.1	
nh	404.7	1.71069
ni	365.0	1.73059

分散式の常数 Constans of Dispersion Formula	
A0	2.7118690
A1	$-9.7417911 \times 10^{-3}$
A2	2.6856244×10^{-2}
A3	1.5479291×10^{-3}
A4	$-8.5425396 \times 10^{-5}$
A5	9.9958701×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0009
$\Delta\theta$ C,A'	−0.0019
$\Delta\theta$ g,d	0.0023
$\Delta\theta$ g,F	0.0029
$\Delta\theta$ i,g	0.0304

部分分散及び部分分散比
Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01453	0.00657	0.00609	0.01103
θ C,t	θ C,A'	θ d,C	θ e,C
0.696	0.315	0.292	0.528
ng−nd	ng−nF	nh−ng	ni−ng
0.02716	0.01236	0.01083	0.03073
θ g,d	θ g,F	θ h,g	θ i,g
1.300	0.592	0.518	1.471
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01548	0.01008	0.01112	0.04183
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.730	0.475	0.525	1.973

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 403 (4)	転移点 Tg (℃) Transformation Point 431
ビッカース硬さ Hv Vickers Hardness 397	屈伏点 At (℃) Yielding Point 483
磨耗度 Ha Abrasion 170	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 93
ヤング率 E (10^8N/m^2) Young's Modulus 548	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 222	
ポアソン比 σ Poisson Ratio 0.232	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 38/33
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 4.08
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.05 7	
330	0.40 3	0.10 3
340	0.70 7	0.42 1
350	0.83 3	0.63 3
360	0.89 3	0.75 4
370	0.92 6	0.82 6
380	0.94 7	0.87 4
390	0.96 4	0.91 3
400	0.97 1	0.93 0
420	0.98 1	0.95 4
440	0.98 2	0.95 7
460	0.98 5	0.96 4
480	0.98 8	0.97 1
500	0.98 8	0.97 1
550	0.99 0	0.97 5
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 5	0.98 9
2000	0.95 4	0.89 0

805255 Schott Type	nd 1.80518	ν d 25.5	nF−nC 0.03163
SF6	ne 1.81264	ν e 25.3	nF'−nC' 0.03217

屈折率 Refractive Indices		
nt	1014.0	1.77523
nA'	768.2	1.78647
nr	706.5	1.79118
nC	656.3	1.79610
nC'	643.9	1.79751
nD	589.3	1.80491
nd	587.6	1.80518
ne	546.1	1.81264
nF	486.1	1.82773
nF'	480.0	1.82968
ng	435.8	1.84701
nG'	434.1	
nh	404.7	1.86429
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	3.1199659
A1	$-1.1028053 \times 10^{-2}$
A2	4.1053407×10^{-2}
A3	3.2448937×10^{-3}
A4	$-2.2709465 \times 10^{-4}$
A5	2.6893010×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0051
$\Delta\theta$ C,A'	−0.0042
$\Delta\theta$ g,d	0.0112
$\Delta\theta$ g,F	0.0107
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.02087	0.00963	0.00908	0.01654
θ C,t	θ C,A'	θ d,C	θ e,C
0.660	0.304	0.287	0.523
ng−nd	ng−nF	nh−ng	ni−ng
0.04183	0.01928	0.01728	
θ g,d	θ g,F	θ h,g	θ i,g
1.322	0.610	0.546	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.02228	0.01513	0.01704	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.693	0.470	0.530	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 349 (3)	転移点 Tg (℃) Transformation Point 426
ビッカース硬さ Hv Vickers Hardness 353	屈伏点 At (℃) Yielding Point 467
磨耗度 Ha Abrasion 220	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 88
ヤング率 E (10^8N/m^2) Young's Modulus 531	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 213	
ポアソン比 σ Poisson Ratio 0.247	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 42/36
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 5.20
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360	0.11 1	
370	0.45 9	0.14 2
380	0.68 4	0.38 7
390	0.81 2	0.59 5
400	0.88 2	0.73 0
420	0.94 8	0.87 7
440	0.97 1	0.93 0
460	0.98 1	0.95 4
480	0.98 8	0.97 1
500	0.99 0	0.97 5
550	0.99 4	0.98 5
600	0.99 4	0.98 5
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 1	0.97 8
1500	0.98 5	0.96 4
2000	0.96 7	0.92 0

805255 Schott Type	nd 1.80518	ν d 25.5	nF−nC 0.03163
SF6W	ne 1.81264	ν e 25.3	nF'−nC' 0.03217

屈折率 Refractive Indices

nt	1014.0	1.77523
nA'	768.2	1.78647
nr	706.5	1.79118
nC	656.3	1.79610
nC'	643.9	1.79751
nD	589.3	1.80491
nd	587.6	1.80518
ne	546.1	1.81264
nF	486.1	1.82773
nF'	480.0	1.82968
ng	435.8	1.84701
nG'	434.1	
nh	404.7	1.86429
ni	365.0	

分散式の常数 Constans of Dispersion Formula

A0	3.1199659
A1	$-1.1028053 \times 10^{-2}$
A2	4.1053407×10^{-2}
A3	3.2448937×10^{-3}
A4	$-2.2709465 \times 10^{-4}$
A5	2.6893010×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	−0.0051
$\Delta\theta$ C,A'	−0.0042
$\Delta\theta$ g,d	0.0112
$\Delta\theta$ g,F	0.0107
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.02087	0.00963	0.00908	0.01654
θ C,t	θ C,A'	θ d,C	θ e,C
0.660	0.304	0.287	0.523
ng−nd	ng−nF	nh−ng	ni−ng
0.04183	0.01928	0.01728	
θ g,d	θ g,F	θ h,g	θ i,g
1.322	0.610	0.546	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.02228	0.01513	0.01704	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.693	0.470	0.530	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 349 (3)	転移点 Tg (℃) Transformation Point 426
ビッカース硬さ Hv Vickers Hardness 353	屈伏点 At (℃) Yielding Point 467
磨耗度 Ha Abrasion 220	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 88
ヤング率 E (10^8N/m^2) Young's Modulus 531	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 213	
ポアソン比 σ Poisson Ratio 0.247	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 41/36
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 5.20
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360	0.11 4	
370	0.48 2	0.16 1
380	0.73 3	0.46 0
390	0.85 7	0.68 0
400	0.91 5	0.80 1
420	0.96 0	0.90 3
440	0.97 5	0.94 0
460	0.98 2	0.95 7
480	0.98 5	0.97 0
500	0.99 0	0.97 5
550	0.99 4	0.98 5
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 2	0.97 9
1500	0.98 5	0.96 4
2000	0.97 0	0.93 0

640346 Schott Type	nd 1.63980	ν d 34.6	nF−nC 0.01849
SF7	ne 1.64418	ν e 34.4	nF'−nC' 0.01875

屈折率 Refractive Indices

nt	1014.0	1.62127
nA'	768.2	1.62851
nr	706.5	1.63141
nC	656.3	1.63439
nC'	643.9	1.63524
nD	589.3	1.63964
nd	587.6	1.63980
ne	546.1	1.64418
nF	486.1	1.65288
nF'	480.0	1.65399
ng	435.8	1.66372
nG'	434.1	
nh	404.7	1.67317
ni	365.0	1.69043

分散式の常数 Constans of Dispersion Formula

A0	2.6147991
A1	$-9.8878577 \times 10^{-3}$
A2	2.3284560×10^{-2}
A3	1.3833180×10^{-3}
A4	$-8.7050383 \times 10^{-5}$
A5	8.8830147×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0020
$\Delta\theta$ C,A'	−0.0012
$\Delta\theta$ g,d	0.0006
$\Delta\theta$ g,F	0.0010
$\Delta\theta$ i,g	0.0225

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01312	0.00588	0.00541	0.00979
θ C,t	θ C,A'	θ d,C	θ e,C
0.710	0.318	0.293	0.529
ng−nd	ng−nF	nh−ng	ni−ng
0.02392	0.01084	0.00945	0.02671
θ g,d	θ g,F	θ h,g	θ i,g
1.294	0.586	0.511	1.445
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01397	0.00894	0.00981	0.03644
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.745	0.477	0.523	1.943

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 389 (4)	転移点 Tg (℃) Transformation Point 442
ビッカース硬さ Hv Vickers Hardness 376	屈伏点 At (℃) Yielding Point 487
磨耗度 Ha Abrasion 170	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 94
ヤング率 E (10^8N/m^2) Young's Modulus 537	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 218	
ポアソン比 σ Poisson Ratio 0.230	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 36/33
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.78
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.07 2	
340	0.48 2	0.16 1
350	0.77 9	0.53 6
360	0.89 7	0.76 2
370	0.95 0	0.88 0
380	0.96 7	0.92 0
390	0.97 8	0.94 7
400	0.98 5	0.96 4
420	0.98 8	0.97 1
440	0.99 0	0.97 5
460	0.99 1	0.97 8
480	0.99 4	0.98 5
500	0.99 4	0.98 5
550	0.99 5	0.98 9
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.96 4	0.91 3

689312 Schott Type	nd 1.68893	ν d 31.2	nF−nC 0.02212
SF8	ne 1.69416	ν e 30.9	nF'−nC' 0.02245

屈折率 Refractive Indices

nt	1014.0	1.66719
nA'	768.2	1.67557
nr	706.5	1.67898
nC	656.3	1.68250
nC'	643.9	1.68350
nD	589.3	1.68874
nd	587.6	1.68893
ne	546.1	1.69416
nF	486.1	1.70462
nF'	480.0	1.70595
ng	435.8	1.71775
nG'	434.1	
nh	404.7	1.72929
ni	365.0	

分散式の常数 Constans of Dispersion Formula

A0	2.7609944
A1	$-1.0310236 \times 10^{-2}$
A2	2.8353165×10^{-2}
A3	1.7229320×10^{-3}
A4	$-9.5600346 \times 10^{-5}$
A5	1.1144821×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0007
$\Delta\theta$ C,A'	−0.0019
$\Delta\theta$ g,d	0.0030
$\Delta\theta$ g,F	0.0032
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01531	0.00693	0.00643	0.01166
θ C,t	θ C,A'	θ d,C	θ e,C
0.692	0.313	0.291	0.527
ng−nd	ng−nF	nh−ng	ni−ng
0.02882	0.01313	0.01154	
θ g,d	θ g,F	θ h,g	θ i,g
1.303	0.594	0.522	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01631	0.01066	0.01179	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.727	0.475	0.525	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 371 (4)	転移点 Tg (℃) Transformation Point 430
ビッカース硬さ Hv Vickers Hardness 388	屈伏点 At (℃) Yielding Point 459
磨耗度 Ha Abrasion 180	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 92
ヤング率 E (10^8N/m^2) Young's Modulus 562	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 229	
ポアソン比 σ Poisson Ratio 0.229	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 39/34
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 4.22
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.10 7	
350	0.42 0	0.11 4
360	0.66 6	0.36 3
370	0.80 6	0.58 3
380	0.87 8	0.72 2
390	0.92 6	0.82 6
400	0.95 4	0.89 0
420	0.97 5	0.94 0
440	0.98 2	0.95 7
460	0.98 8	0.97 1
480	0.99 0	0.97 5
500	0.99 1	0.97 8
550	0.99 4	0.98 5
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 2	0.98 2
2000	0.96 4	0.91 3

654338 Schott Type	nd 1.65446	ν d 33.8	nF−nC 0.01937
SF9	ne 1.65905	ν e 33.5	nF'−nC' 0.01965

屈折率 Refractive Indices		
nt	1014.0	1.63518
nA'	768.2	1.64265
nr	706.5	1.64568
nC	656.3	1.64880
nC'	643.9	1.64968
nD	589.3	1.65429
nd	587.6	1.65446
ne	546.1	1.65905
nF	486.1	1.66817
nF'	480.0	1.66933
ng	435.8	1.67956
nG'	434.1	
nh	404.7	1.68951
ni	365.0	1.70765

分散式の常数 Constans of Dispersion Formula	
A0	2.6551486
A1	$-8.0264838 \times 10^{-3}$
A2	2.6925248×10^{-2}
A3	7.5907464×10^{-4}
A4	8.3286411×10^{-6}
A5	4.2920006×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0006
$\Delta\theta$ C,A'	−0.0008
$\Delta\theta$ g,d	0.0012
$\Delta\theta$ g,F	0.0016
$\Delta\theta$ i,g	0.0218

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01362	0.00615	0.00566	0.01025
θ C,t	θ C,A'	θ d,C	θ e,C
0.703	0.318	0.292	0.529
ng−nd	ng−nF	nh−ng	ni−ng
0.02510	0.01139	0.00995	0.02809
θ g,d	θ g,F	θ h,g	θ i,g
1.296	0.588	0.514	1.450
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01450	0.00937	0.01028	0.03832
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.738	0.477	0.523	1.950

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	389 (4)	転移点 Tg (℃) Transformation Point	443
ビッカース硬さ Hv Vickers Hardness	390	屈伏点 At (℃) Yielding Point	509
磨耗度 Ha Abrasion	160	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	86
ヤング率 E (10^8N/m^2) Young's Modulus	570	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	232		
ポアソン比 σ Poisson Ratio	0.227	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	37/33
耐酸性(粉末法) RA Acid Resistance	1	比重 S.g Specific Gravity	3.92
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.01 0	
340	0.23 6	0.02 7
350	0.62 5	0.30 9
360	0.81 5	0.60 0
370	0.90 5	0.78 0
380	0.94 3	0.86 4
390	0.96 7	0.92 0
400	0.97 5	0.94 0
420	0.98 2	0.95 7
440	0.98 5	0.96 4
460	0.98 8	0.97 1
480	0.99 0	0.97 5
500	0.99 1	0.97 8
550	0.99 4	0.98 5
600	0.99 4	0.98 5
650	0.99 5	0.98 9
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.98 1	0.95 4

728283 Schott Type SF10	nd 1.72825	ν d 28.3	nF−nC 0.02570
	ne 1.73431	ν e 28.1	nF'−nC' 0.02611

屈折率 Refractive Indices		
nt	1014.0	1.70341
nA'	768.2	1.71287
nr	706.5	1.71679
nC	656.3	1.72083
nC'	643.9	1.72199
nD	589.3	1.72803
nd	587.6	1.72825
ne	546.1	1.73431
nF	486.1	1.74653
nF'	480.0	1.74810
ng	435.8	1.76207
nG'	434.1	
nh	404.7	1.77574
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	2.8666695
A1	$-5.5795654 \times 10^{-3}$
A2	4.2787540×10^{-2}
A3	$-1.4536632 \times 10^{-3}$
A4	4.9205096×10^{-4}
A5	$-2.2762614 \times 10^{-5}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0005
$\Delta\theta$ C,A'	−0.0022
$\Delta\theta$ g,d	0.0104
$\Delta\theta$ g,F	0.0101
$\Delta\theta$ i,g	

部分分散及び部分分散比
Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01742	0.00796	0.00742	0.01348
θ C,t	θ C,A'	θ d,C	θ e,C
0.678	0.310	0.289	0.525
ng−nd	ng−nF	nh−ng	ni−ng
0.03382	0.01554	0.01367	
θ g,d	θ g,F	θ h,g	θ i,g
1.316	0.605	0.532	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01858	0.01232	0.01379	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.712	0.472	0.528	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 417 (4)	転移点 Tg (℃) Transformation Point 457
ビッカース硬さ Hv Vickers Hardness 426	屈伏点 At (℃) Yielding Point 499
磨耗度 Ha Abrasion 180	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 84
ヤング率 E (10^8N/m^2) Young's Modulus 608	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 246	
ポアソン比 σ Poisson Ratio 0.235	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 42/37
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 4.27
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ
Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370	0.01 3	
380	0.19 6	0.01 7
390	0.56 4	0.23 9
400	0.79 6	0.56 6
420	0.93 6	0.84 8
440	0.96 8	0.92 3
460	0.97 5	0.94 0
480	0.98 1	0.95 4
500	0.98 5	0.96 4
550	0.98 8	0.97 1
600	0.99 1	0.97 8
650	0.99 2	0.98 2
700	0.99 5	0.98 9
800	0.99 7	0.99 2
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.99 7	0.99 2

728283 Schott Type	nd 1.72825	ν d 28.3	nF−nC 0.02570
SF10W	ne 1.73431	ν e 28.1	nF'−nC' 0.02611

屈折率 Refractive Indices

nt	1014.0	1.70341
nA'	768.2	1.71287
nr	706.5	1.71679
nC	656.3	1.72083
nC'	643.9	1.72199
nD	589.3	1.72803
nd	587.6	1.72825
ne	546.1	1.73431
nF	486.1	1.74653
nF'	480.0	1.74810
ng	435.8	1.76207
nG'	434.1	
nh	404.7	1.77574
ni	365.0	

分散式の常数 Constans of Dispersion Formula

A0	2.8666695
A1	−5.5795654 ×10 $^{-3}$
A2	4.2787540 ×10 $^{-2}$
A3	−1.4536632 ×10 $^{-3}$
A4	4.9205096 ×10 $^{-4}$
A5	−2.2762614 ×10 $^{-5}$

異常分散性 Deviation of Relative Partial Dispersions

Δ θ C,t	−0.0005
Δ θ C,A'	−0.0022
Δ θ g,d	0.0104
Δ θ g,F	0.0101
Δ θ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01742	0.00796	0.00742	0.01348
θ C,t	θ C,A'	θ d,C	θ e,C
0.678	0.310	0.289	0.525
ng−nd	ng−nF	nh−ng	ni−ng
0.03382	0.01554	0.01367	
θ g,d	θ g,F	θ h,g	θ i,g
1.316	0.605	0.532	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01858	0.01232	0.01379	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.712	0.472	0.528	

機械的性質 Mechanical Properties

ヌープ硬さ Hk
Knoop Hardness 417 (4)

ビッカース硬さ Hv
Vickers Hardness 426

磨耗度 Ha
Abrasion 180

ヤング率 E (10^8N/m^2)
Young's Modulus 608

剛性率 G (10^8N/m^2)
Modulus of Rigidity 246

ポアソン比 σ
Poisson Ratio 0.235

化学的性質 Chemical Properties

耐水性(粉末法) RW
Water Resistance 1

耐酸性(粉末法) RA
Acid Resistance 1

耐候性(表面法) DW
Weather Resistance 1

熱的性質 Thermal Properties

転移点 Tg (℃)
Transformation Point 457

屈伏点 At (℃)
Yielding Point 499

線膨張係数 $\alpha \times 10^{-7}$
Thermal Expansion
(100−300℃) 84

備考 Remark s

その他 Other Properties

泡 B
Bubbles

着色度 C
Color Degree 41/37

比重 S.g
Specific Gravity 4.27

脈理 S
Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370	0.04 $_0$	
380	0.19 $_6$	0.01 $_7$
390	0.56 $_4$	0.23 $_9$
400	0.79 $_9$	0.57 $_1$
420	0.94 $_7$	0.87 $_4$
440	0.97 $_1$	0.93 $_0$
460	0.97 $_8$	0.94 $_7$
480	0.98 $_2$	0.95 $_7$
500	0.98 $_5$	0.96 $_4$
550	0.98 $_8$	0.97 $_1$
600	0.99 $_1$	0.97 $_8$
650	0.99 $_2$	0.98 $_2$
700	0.99 $_5$	0.98 $_9$
800	0.99 $_7$	0.99 $_2$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_8$	0.99 $_6$
2000	0.99 $_7$	0.99 $_2$

785257 Schott Type SF11	nd 1.78472	ν d 25.7	nF−nC 0.03052
	ne 1.79191	ν e 25.5	nF'−nC' 0.03105

屈折率 Refractive Indices		
nt	1014.0	1.75583
nA'	768.2	1.76668
nr	706.5	1.77123
nC	656.3	1.77597
nC'	643.9	1.77733
nD	589.3	1.78446
nd	587.6	1.78472
ne	546.1	1.79191
nF	486.1	1.80649
nF'	480.0	1.80838
ng	435.8	1.82525
nG'	434.1	
nh	404.7	1.84221
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	3.0508708
A1	$-9.7242185 \times 10^{-3}$
A2	4.0955581×10^{-2}
A3	2.4712336×10^{-3}
A4	$-1.3840801 \times 10^{-4}$
A5	2.4229056×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0062
$\Delta\theta$ C,A'	−0.0046
$\Delta\theta$ g,d	0.0172
$\Delta\theta$ g,F	0.0162
$\Delta\theta$ i,g	

部分分散及び部分分散比
Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.02014	0.00929	0.00875	0.01594
θ C,t	θ C,A'	θ d,C	θ e,C
0.660	0.304	0.287	0.522
ng−nd	ng−nF	nh−ng	ni−ng
0.04053	0.01876	0.01696	
θ g,d	θ g,F	θ h,g	θ i,g
1.328	0.615	0.556	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.02150	0.01458	0.01647	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.692	0.470	0.530	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 409 (4)	転移点 Tg (℃) Transformation Point 470
ビッカース硬さ Hv Vickers Hardness 383	屈伏点 At (℃) Yielding Point 508
磨耗度 Ha Abrasion 230	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 81
ヤング率 E (10^8N/m^2) Young's Modulus 609	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 245	
ポアソン比 σ Poisson Ratio 0.242	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 43/38
耐酸性(粉末法) RA Acid Resistance 2	比重 S.g Specific Gravity 4.83
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370		
380	0.05 4	
390	0.47 3	0.10 3
400	0.68 2	0.38 4
420	0.91 1	0.79 2
440	0.96 1	0.90 6
460	0.97 5	0.94 0
480	0.98 2	0.95 7
500	0.98 5	0.96 4
550	0.99 1	0.97 8
600	0.99 2	0.98 2
650	0.99 4	0.98 5
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.98 1	0.95 4

785257 Schott Type SF11W	nd	1.78472	ν d	25.7	nF−nC 0.03052
	ne	1.79191	ν e	25.5	nF'−nC' 0.03105

屈折率 Refractive Indices		
nt	1014.0	1.75583
nA'	768.2	1.76668
nr	706.5	1.77123
nC	656.3	1.77597
nC'	643.9	1.77733
nD	589.3	1.78446
nd	587.6	1.78472
ne	546.1	1.79191
nF	486.1	1.80649
nF'	480.0	1.80838
ng	435.8	1.82525
nG'	434.1	
nh	404.7	1.84221
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	3.0508708
A1	$-9.7242185 \times 10^{-3}$
A2	4.0955581×10^{-2}
A3	2.4712336×10^{-3}
A4	$-1.3840801 \times 10^{-4}$
A5	2.4229056×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0062
$\Delta\theta$ C,A'	−0.0046
$\Delta\theta$ g,d	0.0172
$\Delta\theta$ g,F	0.0162
$\Delta\theta$ i,g	

部分分散及び部分分散比
Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.02014	0.00929	0.00875	0.01594
θ C,t	θ C,A'	θ d,C	θ e,C
0.660	0.304	0.287	0.522
ng−nd	ng−nF	nh−ng	ni−ng
0.04053	0.01876	0.01696	
θ g,d	θ g,F	θ h,g	θ i,g
1.328	0.615	0.556	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.02150	0.01458	0.01647	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.692	0.470	0.530	

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	409 (4)	転移点 Tg (℃) Transformation Point	470
ビッカース硬さ Hv Vickers Hardness	383	屈伏点 At (℃) Yielding Point	508
磨耗度 Ha Abrasion	230	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	81
ヤング率 E (10^8N/m^2) Young's Modulus	609	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	245		
ポアソン比 σ Poisson Ratio	0.242	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	42/38
耐酸性(粉末法) RA Acid Resistance	2	比重 S.g Specific Gravity	4.83
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370	0.02 $_7$	
380	0.24 $_1$	0.02 $_8$
390	0.57 $_6$	0.25 $_2$
400	0.77 $_9$	0.53 $_6$
420	0.93 $_3$	0.84 $_2$
440	0.97 $_1$	0.93 $_0$
460	0.98 $_2$	0.95 $_7$
480	0.98 $_8$	0.97 $_1$
500	0.99 $_0$	0.97 $_5$
550	0.99 $_5$	0.98 $_9$
600	0.99 $_7$	0.99 $_2$
650	0.99 $_7$	0.99 $_2$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_5$	0.98 $_9$
2000	0.97 $_8$	0.94 $_7$

648338 Schott Type SF12	nd 1.64831	ν d 33.8	nF−nC 0.01920
	ne 1.65286	ν e 33.5	nF'−nC' 0.01947

屈折率 Refractive Indices		
nt	1014.0	1.62918
nA'	768.2	1.63660
nr	706.5	1.63961
nC	656.3	1.64270
nC'	643.9	1.64358
nD	589.3	1.64815
nd	587.6	1.64831
ne	546.1	1.65286
nF	486.1	1.66190
nF'	480.0	1.66305
ng	435.8	1.67320
nG'	434.1	
nh	404.7	1.68309
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	2.6364208
A1	$-8.3154035 \times 10^{-3}$
A2	2.6282416×10^{-2}
A3	8.4084598×10^{-4}
A4	$-7.4551347 \times 10^{-6}$
A5	5.4381023×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0005
$\Delta\theta$ C,A'	−0.0005
$\Delta\theta$ g,d	0.0017
$\Delta\theta$ g,F	0.0021
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01352	0.00610	0.00561	0.01016
θ C,t	θ C,A'	θ d,C	θ e,C
0.704	0.318	0.292	0.529
ng−nd	ng−nF	nh−ng	ni−ng
0.02489	0.01130	0.00989	
θ g,d	θ g,F	θ h,g	θ i,g
1.296	0.589	0.515	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01440	0.00928	0.01019	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.740	0.477	0.523	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 400 (4)	転移点 Tg (℃) Transformation Point 444
ビッカース硬さ Hv Vickers Hardness 397	屈伏点 At (℃) Yielding Point 489
磨耗度 Ha Abrasion 170	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 96
ヤング率 E (10^8N/m^2) Young's Modulus 569	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 231	
ポアソン比 σ Poisson Ratio 0.233	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 39/35
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.73
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350	0.01 5	
360	0.22 1	0.02 3
370	0.57 0	0.24 5
380	0.79 9	0.57 1
390	0.91 5	0.80 1
400	0.96 4	0.91 3
420	0.99 2	0.98 2
440	0.99 7	0.99 2
460	0.99 7	0.99 2
480	0.99 7	0.99 2
500	0.99 7	0.99 2
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 5	0.98 9
1500	0.98 1	0.95 4
2000	0.93 3	0.84 2

741277 Schott Type SF13	nd 1.74077	ν d 27.7	nF−nC 0.02674
	ne 1.74708	ν e 27.5	nF'−nC' 0.02718

屈折率 Refractive Indices		
nt	1014.0	1.71506
nA'	768.2	1.72485
nr	706.5	1.72889
nC	656.3	1.73307
nC'	643.9	1.73427
nD	589.3	1.74054
nd	587.6	1.74077
ne	546.1	1.74708
nF	486.1	1.75981
nF'	480.0	1.76145
ng	435.8	1.77607
nG'	434.1	
nh	404.7	1.79065
ni	365.0	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01801	0.00822	0.00770	0.01401
θ C,t	θ C,A'	θ d,C	θ e,C
0.674	0.307	0.288	0.524
ng−nd	ng−nF	nh−ng	ni−ng
0.03530	0.01626	0.01458	
θ g,d	θ g,F	θ h,g	θ i,g
1.320	0.608	0.545	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01921	0.01281	0.01437	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.707	0.471	0.529	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370	0.01 3	
380	0.23 2	0.02 6
390	0.56 4	0.23 9
400	0.79 6	0.56 6
420	0.93 6	0.84 8
440	0.96 8	0.92 3
460	0.97 5	0.94 0
480	0.98 1	0.95 4
500	0.98 5	0.96 4
550	0.99 0	0.97 5
600	0.99 4	0.98 5
650	0.99 5	0.98 9
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 7	0.99 2
2000	0.97 5	0.94 0

分散式の常数 Constans of Dispersion Formula	
A0	2.9192174
A1	−1.1963334 ×10 −2
A2	3.2996433 ×10 −2
A3	2.7362910 ×10 −3
A4	−2.0475207 ×10 −4
A5	2.3181362 ×10 −5

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0019
$\Delta\theta$ C,A'	−0.0038
$\Delta\theta$ g,d	0.0133
$\Delta\theta$ g,F	0.0126
$\Delta\theta$ i,g	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 390 (4)	転移点 Tg (℃) Transformation Point 456
ビッカース硬さ Hv Vickers Hardness 383	屈伏点 At (℃) Yielding Point 498
磨耗度 Ha Abrasion 190	線膨張係数 $\alpha\times10^{-7}$ Thermal Expansion (100−300℃) 85
ヤング率 E (10^8N/m^2) Young's Modulus 600	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 243	
ポアソン比 σ Poisson Ratio 0.235	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 42/37
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 4.40
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

762265 Schott Type SF14	nd 1.76182	νd 26.5	nF−nC 0.02873
	ne 1.76859	νe 26.3	nF'−nC' 0.02922

屈折率 Refractive Indices		
nt	1014.0	1.73441
nA'	768.2	1.74480
nr	706.5	1.74910
nC	656.3	1.75357
nC'	643.9	1.75485
nD	589.3	1.76157
nd	587.6	1.76182
ne	546.1	1.76859
nF	486.1	1.78230
nF'	480.0	1.78407
ng	435.8	1.79989
nG'	434.1	
nh	404.7	1.81576
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	2.9839044
A1	−1.2366504 ×10 $^{-2}$
A2	3.5131078 ×10 $^{-2}$
A3	3.2071667 ×10 $^{-3}$
A4	−2.6153414 ×10 $^{-4}$
A5	2.9127433 ×10 $^{-5}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	−0.0030
Δθ C,A'	−0.0046
Δθ g,d	0.0159
Δθ g,F	0.0150
Δθ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01916	0.00877	0.00825	0.01502
θ C,t	θ C,A'	θ d,C	θ e,C
0.667	0.305	0.287	0.523
ng−nd	ng−nF	nh−ng	ni−ng
0.03807	0.01759	0.01587	
θ g,d	θ g,F	θ h,g	θ i,g
1.325	0.612	0.552	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.02044	0.01374	0.01548	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.700	0.470	0.530	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 397 (4)	転移点 Tg (℃) Transformation Point 471
ビッカース硬さ Hv Vickers Hardness 429	屈伏点 At (℃) Yielding Point 502
磨耗度 Ha Abrasion 200	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 82
ヤング率 E (10^{8}N/m^2) Young's Modulus 629	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 254	
ポアソン比 σ Poisson Ratio 0.238	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 43/38
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 4.56
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370		
380	0.06 $_3$	
390	0.29 $_9$	0.04 $_9$
400	0.54 $_6$	0.22 $_0$
420	0.80 $_8$	0.58 $_8$
440	0.90 $_7$	0.78 $_3$
460	0.94 $_8$	0.87 $_7$
480	0.96 $_8$	0.92 $_3$
500	0.97 $_5$	0.94 $_0$
550	0.98 $_5$	0.96 $_4$
600	0.98 $_5$	0.96 $_4$
650	0.98 $_8$	0.97 $_1$
700	0.99 $_2$	0.98 $_2$
800	0.99 $_7$	0.99 $_2$
1060	0.98 $_2$	0.95 $_7$
1500	0.97 $_4$	0.93 $_7$
2000	0.95 $_4$	0.89 $_0$

699300 Schott Type SF15	nd	1.69895	ν d	30.0	nF−nC 0.02326
	ne	1.70445	ν e	29.8	nF'−nC' 0.02362

屈折率 Refractive Indices		
nt	1014.0	1.67626
nA'	768.2	1.68497
nr	706.5	1.68853
nC	656.3	1.69221
nC'	643.9	1.69326
nD	589.3	1.69875
nd	587.6	1.69895
ne	546.1	1.70445
nF	486.1	1.71547
nF'	480.0	1.71688
ng	435.8	1.72941
nG'	434.1	
nh	404.7	1.74177
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	2.7895665
A1	$-1.0181904 \times 10^{-2}$
A2	2.9925345×10^{-2}
A3	1.8309044×10^{-3}
A4	$-1.0955329 \times 10^{-4}$
A5	1.4219070×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0006
$\Delta\theta$ C,A'	−0.0027
$\Delta\theta$ g,d	0.0074
$\Delta\theta$ g,F	0.0073
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01595	0.00724	0.00674	0.01224
θ C,t	θ C,A'	θ d,C	θ e,C
0.686	0.311	0.290	0.526
ng−nd	ng−nF	nh−ng	ni−ng
0.03046	0.01394	0.01236	
θ g,d	θ g,F	θ h,g	θ i,g
1.310	0.599	0.531	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01700	0.01119	0.01243	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.720	0.474	0.526	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 390 (4)	転移点 Tg (℃) Transformation Point 465
ビッカース硬さ Hv Vickers Hardness 412	屈伏点 At (℃) Yielding Point 522
磨耗度 Ha Abrasion 190	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 82
ヤング率 E (10^8N/m^2) Young's Modulus 599	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 243	
ポアソン比 σ Poisson Ratio 0.232	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 41/37
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 4.08
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370	0.05 4	
380	0.39 2	0.09 6
390	0.71 4	0.43 0
400	0.95 0	0.88 0
420	0.97 5	0.94 0
440	0.99 1	0.97 8
460	0.99 5	0.98 9
480	0.99 7	0.99 2
500	0.99 7	0.99 2
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 1	0.97 8
1500	0.97 7	0.94 4
2000	0.94 0	0.85 7

722293 Schott Type	nd 1.72151	ν d 29.3	nF−nC 0.02464
SF18	ne 1.72733	ν e 29.1	nF'−nC' 0.02503

屈折率 Refractive Indices		
nt	1014.0	1.69759
nA'	768.2	1.70672
nr	706.5	1.71048
nC	656.3	1.71437
nC'	643.9	1.71548
nD	589.3	1.72129
nd	587.6	1.72151
ne	546.1	1.72733
nF	486.1	1.73901
nF'	480.0	1.74051
ng	435.8	1.75376
nG'	434.1	
nh	404.7	1.76679
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	2.8594457
A1	$-1.0229223 \times 10^{-2}$
A2	3.1936097×10^{-2}
A3	2.0257382×10^{-3}
A4	$-1.1649195 \times 10^{-4}$
A5	1.4181908×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0018
$\Delta\theta$ C,A'	−0.0026
$\Delta\theta$ g,d	0.0052
$\Delta\theta$ g,F	0.0055
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01678	0.00765	0.00714	0.01296
θ C,t	θ C,A'	θ d,C	θ e,C
0.681	0.310	0.290	0.526
ng−nd	ng−nF	nh−ng	ni−ng
0.03225	0.01475	0.01303	
θ g,d	θ g,F	θ h,g	θ i,g
1.309	0.599	0.529	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01789	0.01185	0.01318	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.715	0.473	0.527	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 360 (4)	転移点 Tg (℃) Transformation Point 431
ビッカース硬さ Hv Vickers Hardness 397	屈伏点 At (℃) Yielding Point 471
磨耗度 Ha Abrasion 210	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 91
ヤング率 E (10^8N/m^2) Young's Modulus 549	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 222	
ポアソン比 σ Poisson Ratio 0.237	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles B
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 40/34
耐酸性(粉末法) RA Acid Resistance 2	比重 S.g Specific Gravity 4.50
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.05 0	
350	0.18 7	0.01 5
360	0.48 2	0.16 1
370	0.70 1	0.41 1
380	0.81 5	0.60 0
390	0.88 3	0.73 3
400	0.92 9	0.83 2
420	0.96 1	0.90 6
440	0.97 4	0.93 7
460	0.98 0	0.95 0
480	0.98 2	0.95 7
500	0.98 5	0.96 4
550	0.98 8	0.97 1
600	0.99 0	0.97 5
650	0.99 1	0.97 8
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 7	0.99 2
2000	0.96 8	0.92 3

667331 Schott Type	nd 1.66680	ν d 33.1	nF−nC 0.02015
SF19	ne 1.67157	ν e 32.9	nF'−nC' 0.02044

屈折率 Refractive Indices

nt	1014.0	1.64680
nA'	768.2	1.65455
nr	706.5	1.65769
nC	656.3	1.66092
nC'	643.9	1.66184
nD	589.3	1.66663
nd	587.6	1.66680
ne	546.1	1.67157
nF	486.1	1.68107
nF'	480.0	1.68228
ng	435.8	1.69295
nG'	434.1	
nh	404.7	1.70335
ni	365.0	1.72241

分散式の常数 Constans of Dispersion Formula

A0	2.6946895
A1	$-9.4341368 \times 10^{-3}$
A2	2.6509398×10^{-2}
A3	1.2938458×10^{-3}
A4	$-5.9141879 \times 10^{-5}$
A5	8.3247213×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0002
$\Delta\theta$ C,A'	−0.0013
$\Delta\theta$ g,d	0.0017
$\Delta\theta$ g,F	0.0021
$\Delta\theta$ i,g	0.0283

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01412	0.00637	0.00588	0.01065
θ C,t	θ C,A'	θ d,C	θ e,C
0.701	0.316	0.292	0.529
ng−nd	ng−nF	nh−ng	ni−ng
0.02615	0.01188	0.01040	0.02946
θ g,d	θ g,F	θ h,g	θ i,g
1.298	0.590	0.516	1.462
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01504	0.00973	0.01071	0.04013
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.736	0.476	0.524	1.963

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	418 (4)	転移点 Tg (℃) Transformation Point	442
ビッカース硬さ Hv Vickers Hardness	425	屈伏点 At (℃) Yielding Point	479
磨耗度 Ha Abrasion	180	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	89
ヤング率 E (10^8N/m^2) Young's Modulus	579	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	235		
ポアソン比 σ Poisson Ratio	0.230	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	38/34
耐酸性(粉末法) RA Acid Resistance	2	比重 S.g Specific Gravity	4.02
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.12 9	
350	0.47 7	0.15 7
360	0.72 1	0.44 2
370	0.84 8	0.66 2
380	0.90 8	0.78 6
390	0.95 0	0.88 0
400	0.97 2	0.93 3
420	0.99 1	0.97 8
440	0.99 4	0.98 5
460	0.99 8	0.99 6
480	0.99 8	0.99 6
500	0.99 8	0.99 6
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 4	0.98 5
1500	0.99 0	0.97 5
2000	0.95 8	0.90 0

720293 Schott Type	nd 1.72022	ν d 29.3	nF−nC 0.02457
SFn1	ne 1.72602	ν e 29.1	nF'−nC' 0.02496

屈折率 Refractive Indices

nt	1014.0	1.69637
nA'	768.2	1.70547
nr	706.5	1.70922
nC	656.3	1.71310
nC'	643.9	1.71421
nD	589.3	1.72000
nd	587.6	1.72022
ne	546.1	1.72602
nF	486.1	1.73767
nF'	480.0	1.73917
ng	435.8	1.75240
nG'	434.1	
nh	404.7	1.76541
ni	365.0	1.78962

分散式の常数 Constans of Dispersion Formula

A0	2.8555571
A1	$-1.0282883 \times 10^{-2}$
A2	3.1719134×10^{-2}
A3	2.0430760×10^{-3}
A4	$-1.1962118 \times 10^{-4}$
A5	1.4485728×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	−0.0020
$\Delta\theta$ C,A'	−0.0026
$\Delta\theta$ g,d	0.0062
$\Delta\theta$ g,F	0.0064
$\Delta\theta$ i,g	0.0518

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01673	0.00763	0.00712	0.01292
θ C,t	θ C,A'	θ d,C	θ e,C
0.681	0.311	0.290	0.526
ng−nd	ng−nF	nh−ng	ni−ng
0.03218	0.01473	0.01301	0.03722
θ g,d	θ g,F	θ h,g	θ i,g
1.310	0.600	0.530	1.515
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01784	0.01181	0.01315	0.05045
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.715	0.473	0.527	2.021

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	379 (4)
ビッカース硬さ Hv Vickers Hardness	378
磨耗度 Ha Abrasion	190
ヤング率 E (10^8N/m^2) Young's Modulus	545
剛性率 G (10^8N/m^2) Modulus of Rigidity	221
ポアソン比 σ Poisson Ratio	0.236

化学的性質 Chemical Properties

耐水性(粉末法) RW Water Resistance	1
耐酸性(粉末法) RA Acid Resistance	2
耐候性(表面法) DW Weather Resistance	1

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	429
屈伏点 At (℃) Yielding Point	469
線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	88
備考 Remark s	

その他 Other Properties

泡 B Bubbles	
着色度 C Color Degree	40/35
比重 S.g Specific Gravity	4.49
脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.01 3	
340	0.23 2	0.02 6
350	0.54 0	0.21 4
360	0.73 0	0.45 6
370	0.81 9	0.60 8
380	0.87 6	0.71 9
390	0.90 9	0.78 9
400	0.92 9	0.83 2
420	0.95 1	0.88 3
440	0.96 0	0.90 3
460	0.96 4	0.91 3
480	0.97 5	0.94 0
500	0.97 5	0.94 0
550	0.98 2	0.95 7
600	0.98 5	0.96 4
650	0.99 0	0.97 5
700	0.99 2	0.98 2
800	0.99 8	0.99 6
1060	0.99 2	0.98 2
1500	0.98 2	0.95 7
2000	0.95 4	0.89 0

847239 Schott Type	nd 1.84666	ν d 23.9	nF−nC 0.03545
SFn3	ne 1.85502	ν e 23.7	nF'−nC' 0.03608

屈折率 Refractive Indices		
nt	1014.0	1.81342
nA'	768.2	1.82586
nr	706.5	1.83108
nC	656.3	1.83653
nC'	643.9	1.83810
nD	589.3	1.84635
nd	587.6	1.84666
ne	546.1	1.85502
nF	486.1	1.87198
nF'	480.0	1.87418
ng	435.8	1.89379
nG'	434.1	
nh	404.7	1.91347
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	3.2601657
A1	$-1.5627611 \times 10^{-2}$
A2	4.0634475×10^{-2}
A3	5.6186021×10^{-3}
A4	$-5.2724573 \times 10^{-4}$
A5	4.7554561×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0057
$\Delta\theta$ C,A'	−0.0058
$\Delta\theta$ g,d	0.0151
$\Delta\theta$ g,F	0.0141
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.02311	0.01067	0.01013	0.01849
θ C,t	θ C,A'	θ d,C	θ e,C
0.652	0.301	0.286	0.522
ng−nd	ng−nF	nh−ng	ni−ng
0.04713	0.02181	0.01968	
θ g,d	θ g,F	θ h,g	θ i,g
1.329	0.615	0.555	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.02468	0.01692	0.01916	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.684	0.469	0.531	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 319 (3)	転移点 Tg (℃) Transformation Point 415
ビッカース硬さ Hv Vickers Hardness 338	屈伏点 At (℃) Yielding Point 447
磨耗度 Ha Abrasion 310	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 88
ヤング率 E (10^8N/m^2) Young's Modulus 540	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 215	
ポアソン比 σ Poisson Ratio 0.258	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 45/37
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 5.50
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370	0.08 6	
380	0.31 4	0.05 5
390	0.52 8	0.20 3
400	0.69 2	0.39 8
420	0.84 6	0.65 9
440	0.92 2	0.81 7
460	0.95 7	0.89 6
480	0.97 1	0.93 0
500	0.97 8	0.94 7
550	0.98 8	0.97 1
600	0.99 0	0.97 5
650	0.99 1	0.97 8
700	0.99 4	0.98 5
800	0.99 7	0.99 2
1060	0.99 7	0.98 2
1500	0.99 0	0.97 5
2000	0.97 1	0.93 0

673322	nd 1.67270	νd 32.2	nF−nC 0.02089
K-SFLD5	ne 1.67763	νe 31.9	nF'−nC' 0.02121

屈折率 Refractive Indices

nt	1014.0	1.65175
nA'	768.2	1.65998
nr	706.5	1.66326
nC	656.3	1.66661
nC'	643.9	1.66756
nD	589.3	1.67251
nd	587.6	1.67270
ne	546.1	1.67763
nF	486.1	1.68750
nF'	480.0	1.68877
ng	435.8	1.69998
nG'	434.1	
nh	404.7	1.71101
ni	365.0	

分散式の常数 Constans of Dispersion Formula

A0	2.7102301
A1	−1.0851642 ×10 $^{-2}$
A2	2.9534854 ×10 $^{-2}$
A3	4.1107114 ×10 $^{-4}$
A4	9.7348452 ×10 $^{-5}$
A5	8.8402787 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions

Δθ C,t	0.0149
Δθ C,A'	0.0009
Δθ g,d	0.0081
Δθ g,F	0.0086
Δθ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01486	0.00663	0.00609	0.01102
θ C,t	θ C,A'	θ d,C	θ e,C
0.711	0.317	0.292	0.528
ng−nd	ng−nF	nh−ng	ni−ng
0.02728	0.01248	0.01103	
θ g,d	θ g,F	θ h,g	θ i,g
1.306	0.597	0.528	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01581	0.01007	0.01114	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.745	0.475	0.525	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 489 (5)	転移点 Tg (℃) Transformation Point 528
ビッカース硬さ Hv Vickers Hardness 515	屈伏点 At (℃) Yielding Point 557
磨耗度 Ha Abrasion 195	線膨張係数 α ×10^{-7} Thermal Expansion (100-300℃) 116
ヤング率 E (10^{8}N/m^2) Young's Modulus 824	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 334	
ポアソン比 σ Poisson Ratio 0.232	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 2	着色度 C Color Degree 41/36
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 2.85
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350	0.00 $_3$	
360	0.13 $_0$	0.00 $_6$
370	0.47 $_0$	0.15 $_2$
380	0.70 $_9$	0.42 $_4$
390	0.82 $_2$	0.61 $_3$
400	0.88 $_1$	0.72 $_8$
420	0.93 $_1$	0.83 $_6$
440	0.95 $_2$	0.88 $_5$
460	0.96 $_3$	0.90 $_9$
480	0.97 $_1$	0.93 $_0$
500	0.97 $_9$	0.94 $_8$
550	0.98 $_8$	0.97 $_2$
600	0.98 $_8$	0.97 $_2$
650	0.98 $_8$	0.97 $_6$
700	0.99 $_0$	0.97 $_6$
800	0.99 $_6$	0.98 $_9$
1060	0.99 $_7$	0.99 $_3$
1500	0.99 $_7$	0.99 $_2$
2000	0.98 $_1$	0.95 $_3$

805254	nd 1.80518	ν d 25.4	nF-nC 0.03171
K-SFLD6	ne 1.81266	ν e 25.2	nF'-nC' 0.03225

屈折率 Refractive Indices

nt	1014.0	1.77489
nA'	768.2	1.78642
nr	706.5	1.79117
nC	656.3	1.79610
nC'	643.9	1.79751
nD	589.3	1.80491
nd	587.6	1.80518
ne	546.1	1.81266
nF	486.1	1.82781
nF'	480.0	1.82976
ng	435.8	1.84730
nG'	434.1	
nh	404.7	1.86491
ni	365.0	

分散式の常数 Constans of Dispersion Formula

A0	3.1243727
A1	$-1.5193345 \times 10^{-2}$
A2	3.9497962×10^{-2}
A3	3.4481457×10^{-3}
A4	$-2.4093048 \times 10^{-4}$
A5	2.9523810×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0043
$\Delta\theta$ C,A'	-0.0033
$\Delta\theta$ g,d	0.0169
$\Delta\theta$ g,F	0.0157
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC-nt	nC-nA'	nd-nC	ne-nC
0.02121	0.00968	0.00908	0.01656
θ C,t	θ C,A'	θ d,C	θ e,C
0.669	0.305	0.286	0.522
ng-nd	ng-nF	nh-ng	ni-ng
0.04212	0.01949	0.01761	
θ g,d	θ g,F	θ h,g	θ i,g
1.328	0.615	0.555	
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.02262	0.01515	0.01710	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.701	0.470	0.530	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 479 (5)	転移点 Tg (℃) Transformation Point 609
ビッカース硬さ Hv Vickers Hardness 505	屈伏点 At (℃) Yielding Point 633
磨耗度 Ha Abrasion 175	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 107
ヤング率 E (10^8N/m^2) Young's Modulus 943	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 373	
ポアソン比 σ Poisson Ratio 0.263	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 45/37
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.40
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370	0.13 8	
380	0.48 2	0.16 1
390	0.69 4	0.40 2
400	0.79 5	0.56 4
420	0.88 4	0.73 6
440	0.92 3	0.82 0
460	0.94 3	0.86 4
480	0.95 7	0.89 6
500	0.96 5	0.91 6
550	0.98 2	0.95 7
600	0.98 5	0.96 4
650	0.98 8	0.97 1
700	0.99 1	0.97 8
800	0.99 5	0.99 0
1060	0.99 5	0.99 0
1500	0.99 4	0.98 8
2000	0.97 4	0.93 7

728284	nd 1.72825	ν d 28.4	nF−nC 0.02560
K-SFLD10	ne 1.73429	ν e 28.2	nF'−nC' 0.02601

屈折率 Refractive Indices		
nt	1014.0	1.70328
nA'	768.2	1.71291
nr	706.5	1.71682
nC	656.3	1.72086
nC'	643.9	1.72202
nD	589.3	1.72803
nd	587.6	1.72825
ne	546.1	1.73429
nF	486.1	1.74646
nF'	480.0	1.74803
ng	435.8	1.76201
nG'	434.1	
nh	404.7	1.77599
ni	365.0	1.80259

分散式の常数 Constans of Dispersion Formula	
A0	2.8794157
A1	$-1.2203687 \times 10^{-2}$
A2	3.3512060×10^{-2}
A3	1.8761149×10^{-3}
A4	$-9.8708915 \times 10^{-5}$
A5	1.7667333×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0078
$\Delta\theta$ C,A'	−0.0016
$\Delta\theta$ g,d	0.0134
$\Delta\theta$ g,F	0.0130
$\Delta\theta$ i,g	0.1154

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01758	0.00795	0.00739	0.01343
θ C,t	θ C,A'	θ d,C	θ e,C
0.687	0.311	0.289	0.525
ng−nd	ng−nF	nh−ng	ni−ng
0.03376	0.01555	0.01398	0.04058
θ g,d	θ g,F	θ h,g	θ i,g
1.319	0.607	0.546	1.585
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01874	0.01227	0.01374	0.05456
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.720	0.472	0.528	2.098

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 518 (5)	転移点 Tg (℃) Transformation Point 581
ビッカース硬さ Hv Vickers Hardness 480	屈伏点 At (℃) Yielding Point 613
磨耗度 Ha Abrasion 150	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 98
ヤング率 E (10^8N/m^2) Young's Modulus 908	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 369	
ポアソン比 σ Poisson Ratio 0.232	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 43/37
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.07
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360	0.00 3	
370	0.18 2	0.00 4
380	0.36 0	0.07 8
390	0.40 2	0.29 8
400	0.76 8	0.51 8
420	0.90 7	0.78 3
440	0.95 1	0.88 4
460	0.96 6	0.91 8
480	0.97 5	0.93 9
500	0.98 1	0.95 4
550	0.99 0	0.92 9
600	0.99 1	0.97 7
650	0.98 9	0.97 3
700	0.99 1	0.97 7
800	0.99 4	0.98 5
1060	0.99 8	0.99 6
1500	0.99 6	0.99 2
2000	0.97 9	0.95 0

785259	nd 1.78472	νd 25.9	nF−nC 0.03030
K-SFLD11	ne 1.79187	νe 25.7	nF'−nC' 0.03081

屈折率 Refractive Indices

nt	1014.0	1.75569
nA'	768.2	1.76677
nr	706.5	1.77131
nC	656.3	1.77604
nC'	643.9	1.77740
nD	589.3	1.78447
nd	587.6	1.78472
ne	546.1	1.79187
nF	486.1	1.80634
nF'	480.0	1.80821
ng	435.8	1.82494
nG'	434.1	
nh	404.7	1.84179
ni	365.0	

分散式の常数 Constans of Dispersion Formula

A0	3.0594160
A1	$-1.5171267 \times 10^{-2}$
A2	3.6396337×10^{-2}
A3	3.6902359×10^{-3}
A4	$-3.1750636 \times 10^{-4}$
A5	3.4272301×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions

Δθ C,t	0.0046
Δθ C,A'	−0.0032
Δθ g,d	0.0170
Δθ g,F	0.0157
Δθ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.02035	0.00927	0.00868	0.01583
θ C,t	θ C,A'	θ d,C	θ e,C
0.672	0.306	0.286	0.522
ng−nd	ng−nF	nh−ng	ni−ng
0.04022	0.01860	0.01685	
θ g,d	θ g,F	θ h,g	θ i,g
1.327	0.614	0.556	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.02171	0.01447	0.01634	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.705	0.470	0.530	

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	522 (5)
ビッカース硬さ Hv Vickers Hardness	541
磨耗度 Ha Abrasion	170
ヤング率 E (10^8N/m^2) Young's Modulus	929
剛性率 G (10^8N/m^2) Modulus of Rigidity	368
ポアソン比 σ Poisson Ratio	0.262

化学的性質 Chemical Properties

耐水性(粉末法) RW Water Resistance	1
耐酸性(粉末法) RA Acid Resistance	1
耐候性(表面法) DW Weather Resistance	1

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	609
屈伏点 At (℃) Yielding Point	640
線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃)	105
備考 Remark s	

その他 Other Properties

泡 B Bubbles	
着色度 C Color Degree	44/37
比重 S.g Specific Gravity	3.30
脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370	0.10 7	
380	0.47 0	0.15 1
390	0.71 4	0.43 0
400	0.82 2	0.61 3
420	0.90 1	0.77 1
440	0.93 2	0.83 8
460	0.94 7	0.87 4
480	0.95 7	0.89 6
500	0.96 7	0.92 0
550	0.98 2	0.95 7
600	0.98 5	0.96 4
650	0.98 5	0.96 4
700	0.98 8	0.97 1
800	0.99 7	0.99 2
1060	0.99 7	0.99 2
1500	0.98 8	0.97 1
2000	0.96 8	0.92 3

799246	nd 1.79925	ν d 24.6	nF−nC 0.03246
K-SFLD66	ne 1.80689	ν e 24.4	nF'−nC' 0.03303

屈折率 Refractive Indices

nt	1014.0	1.76837
nA'	768.2	1.78007
nr	706.5	1.78492
nC	656.3	1.78995
nC'	643.9	1.79140
nD	589.3	1.79897
nd	587.6	1.79925
ne	546.1	1.80689
nF	486.1	1.82241
nF'	480.0	1.82443
ng	435.8	1.84245
nG'	434.1	
nh	404.7	1.86063
ni	365.0	

分散式の常数 Constans of Dispersion Formula

A0	3.0980083
A1	$-1.3740976 \times 10^{-2}$
A2	4.1549812×10^{-2}
A3	3.1784407×10^{-3}
A4	$-2.1039050 \times 10^{-4}$
A5	3.0064862×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0038
$\Delta\theta$ C,A'	−0.0033
$\Delta\theta$ g,d	0.0179
$\Delta\theta$ g,F	0.0173
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.02158	0.00988	0.00930	0.01694
θ C,t	θ C,A'	θ d,C	θ e,C
0.665	0.304	0.287	0.522
ng−nd	ng−nF	nh−ng	ni−ng
0.04320	0.02004	0.01818	
θ g,d	θ g,F	θ h,g	θ i,g
1.331	0.617	0.560	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.02303	0.01549	0.01754	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.697	0.469	0.531	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 499 (5)	転移点 Tg (℃) Transformation Point 579
ビッカース硬さ Hv Vickers Hardness 529	屈伏点 At (℃) Yielding Point 600
磨耗度 Ha Abrasion 200	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 107
ヤング率 E (10^8N/m^2) Young's Modulus 840	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 333	
ポアソン比 σ Poisson Ratio 0.262	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 44/37
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.35
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370	0.18 5	0.01 4
380	0.54 9	0.22 4
390	0.75 7	0.49 8
400	0.85 2	0.67 0
420	0.93 0	0.83 5
440	0.96 1	0.90 6
460	0.97 5	0.94 0
480	0.98 2	0.95 7
500	0.99 0	0.97 5
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 4	0.98 5
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.99 4	0.98 5
1500	0.98 8	0.97 1
2000	0.96 8	0.92 3

847239	nd 1.84666	νd 23.9	nF−nC 0.03545
K-SFLDn3	ne 1.85500	νe 23.7	nF'−nC' 0.03608

屈折率 Refractive Indices		
nt	1014.0	1.81311
nA'	768.2	1.82581
nr	706.5	1.83107
nC	656.3	1.83654
nC'	643.9	1.83811
nD	589.3	1.84635
nd	587.6	1.84666
ne	546.1	1.85500
nF	486.1	1.87199
nF'	480.0	1.87419
ng	435.8	1.89400
nG'	434.1	
nh	404.7	1.91406
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	3.2574868
A1	−1.6403729 ×10 $^{-2}$
A2	4.4271848 ×10 $^{-2}$
A3	4.1662405 ×10 $^{-3}$
A4	−3.1425800 ×10 $^{-4}$
A5	3.9290854 ×10 $^{-5}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0033
Δθ C,A'	−0.0042
Δθ g,d	0.0210
Δθ g,F	0.0197
Δθ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.02343	0.01073	0.01012	0.01846
θ C,t	θ C,A'	θ d,C	θ e,C
0.661	0.303	0.285	0.521
ng−nd	ng−nF	nh−ng	ni−ng
0.04734	0.02201	0.02006	
θ g,d	θ g,F	θ h,g	θ i,g
1.335	0.621	0.566	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.02500	0.01689	0.01919	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.693	0.468	0.532	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 529 (5)	転移点 Tg (℃) Transformation Point 618
ビッカース硬さ Hv Vickers Hardness 558	屈伏点 At (℃) Yielding Point 648
磨耗度 Ha Abrasion 150	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 106
ヤング率 E (10^{8}N/m^2) Young's Modulus 980	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 388	
ポアソン比 σ Poisson Ratio 0.263	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree (44)/38
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.49
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360	0.00 1	
370	0.01 5	
380	0.13 7	0.00 7
390	0.35 6	0.07 7
400	0.55 5	0.23 1
420	0.79 7	0.56 9
440	0.89 9	0.76 7
460	0.94 0	0.85 6
480	0.96 0	0.90 3
500	0.97 2	0.93 0
550	0.98 8	0.97 1
600	0.99 1	0.97 8
650	0.99 1	0.97 8
700	0.99 2	0.98 1
800	0.99 5	0.98 8
1060	0.99 8	0.99 6
1500	0.99 7	0.99 2
2000	0.97 8	0.94 8

着色度の()は透過率70%のときの波長を表す。

643581 Schott Type	nd 1.64250	νd 58.1	nF−nC 0.01106
K-LaK6	ne 1.64514	νe 57.9	nF'−nC' 0.01115

屈折率 Refractive Indices

nt	1014.0	1.63008
nA'	768.2	1.63530
nr	706.5	1.63723
nC	656.3	1.63914
nC'	643.9	1.63968
nD	589.3	1.64240
nd	587.6	1.64250
ne	546.1	1.64514
nF	486.1	1.65020
nF'	480.0	1.65083
ng	435.8	1.65622
nG'	434.1	
nh	404.7	1.66122
ni	365.0	1.66963

分散式の常数 Constans of Dispersion Formula

A0	2.6515563
A1	$-1.0678481 \times 10^{-2}$
A2	1.7086720×10^{-2}
A3	$-9.2823421 \times 10^{-5}$
A4	6.0970481×10^{-5}
A5	$-3.5490225 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions

Δθ C,t	0.0020
Δθ C,A'	0.0009
Δθ g,d	−0.0057
Δθ g,F	−0.0060
Δθ i,g	−0.0274

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.00906	0.00384	0.00336	0.00600
θ C,t	θ C,A'	θ d,C	θ e,C
0.819	0.347	0.304	0.542
ng−nd	ng−nF	nh−ng	ni−ng
0.01372	0.00602	0.00500	0.01341
θ g,d	θ g,F	θ h,g	θ i,g
1.241	0.544	0.452	1.212
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00960	0.00546	0.00569	0.01880
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.861	0.490	0.510	1.686

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	498 (5)
ビッカース硬さ Hv Vickers Hardness	570
磨耗度 Ha Abrasion	170
ヤング率 E (10^8N/m^2) Young's Modulus	868
剛性率 G (10^8N/m^2) Modulus of Rigidity	345
ポアソン比 σ Poisson Ratio	0.257

化学的性質 Chemical Properties

耐水性(粉末法) RW Water Resistance	3
耐酸性(粉末法) RA Acid Resistance	4
耐候性(表面法) DW Weather Resistance	2

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	651
屈伏点 At (℃) Yielding Point	668
線膨張係数 α ×10^{-7} Thermal Expansion (100-300℃)	79
備考 Remark s	

その他 Other Properties

泡 B Bubbles	B
着色度 C Color Degree	36/30
比重 S.g Specific Gravity	3.76
脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300	0.08 6	
310	0.28 9	0.04 5
320	0.51 0	0.18 6
330	0.69 4	0.40 2
340	0.81 2	0.59 5
350	0.88 7	0.74 2
360	0.93 2	0.83 8
370	0.95 7	0.89 6
380	0.97 1	0.93 0
390	0.98 0	0.95 0
400	0.98 2	0.95 7
420	0.98 7	0.96 8
440	0.98 7	0.96 8
460	0.99 0	0.97 5
480	0.99 4	0.98 5
500	0.99 4	0.98 5
550	0.99 4	0.98 5
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 7	0.99 2
2000	0.97 0	0.92 0

652583 Schott Type	nd 1.65160	ν d 58.3	nF−nC 0.01118
K-LaK7	ne 1.65427	ν e 58.1	nF'−nC' 0.01127

屈折率 Refractive Indices		
nt	1014.0	1.63907
nA'	768.2	1.64432
nr	706.5	1.64626
nC	656.3	1.64820
nC'	643.9	1.64875
nD	589.3	1.65150
nd	587.6	1.65160
ne	546.1	1.65427
nF	486.1	1.65938
nF'	480.0	1.66002
ng	435.8	1.66546
nG'	434.1	
nh	404.7	1.67050
ni	365.0	1.67909

分散式の常数 Constans of Dispersion Formula	
A0	2.6805890
A1	−1.0513873 ×10 $^{-2}$
A2	1.7140176 ×10 $^{-2}$
A3	8.5811085 ×10 $^{-5}$
A4	2.1348318 ×10 $^{-5}$
A5	−7.4091988 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
Δ θ C,t	−0.0015
Δ θ C,A'	0.0005
Δ θ g,d	−0.0061
Δ θ g,F	−0.0062
Δ θ i,g	−0.0193

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00913	0.00388	0.00340	0.00607
θ C,t	θ C,A'	θ d,C	θ e,C
0.817	0.347	0.304	0.543
ng−nd	ng−nF	nh−ng	ni−ng
0.01386	0.00608	0.00504	0.01363
θ g,d	θ g,F	θ h,g	θ i,g
1.240	0.544	0.451	1.219
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00968	0.00552	0.00575	0.01907
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.859	0.490	0.510	1.692

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 484 (5)	転移点 Tg (℃) Transformation Point 645
ビッカース硬さ Hv Vickers Hardness 500	屈伏点 At (℃) Yielding Point 674
磨耗度 Ha Abrasion 150	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 84
ヤング率 E (10^{8}N/m^2) Young's Modulus 888	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 351	
ポアソン比 σ Poisson Ratio 0.264	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 3	着色度 C Color Degree 36/30
耐酸性(粉末法) RA Acid Resistance 5	比重 S.g Specific Gravity 3.76
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290	0.01 $_0$	
300	0.06 $_6$	
310	0.19 $_6$	0.01 $_7$
320	0.37 $_1$	0.08 $_4$
330	0.55 $_8$	0.23 $_2$
340	0.71 $_1$	0.42 $_7$
350	0.81 $_9$	0.60 $_8$
360	0.89 $_1$	0.75 $_1$
370	0.93 $_4$	0.84 $_5$
380	0.95 $_7$	0.89 $_6$
390	0.97 $_1$	0.93 $_0$
400	0.97 $_8$	0.94 $_7$
420	0.98 $_5$	0.96 $_4$
440	0.98 $_8$	0.97 $_1$
460	0.99 $_0$	0.97 $_5$
480	0.99 $_2$	0.98 $_2$
500	0.99 $_4$	0.98 $_5$
550	0.99 $_4$	0.98 $_5$
600	0.99 $_4$	0.98 $_5$
650	0.99 $_4$	0.98 $_5$
700	0.99 $_7$	0.99 $_2$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_7$	0.99 $_2$
2000	0.97 $_1$	0.93 $_0$

713539 Schott Type	nd 1.71300	νd 53.9	nF-nC 0.01323
K-LaK8	ne 1.71616	νe 53.7	nF'-nC' 0.01334

屈折率 Refractive Indices		
nt	1014.0	1.69811
nA'	768.2	1.70440
nr	706.5	1.70670
nC	656.3	1.70898
nC'	643.9	1.70963
nD	589.3	1.71289
nd	587.6	1.71300
ne	546.1	1.71616
nF	486.1	1.72221
nF'	480.0	1.72297
ng	435.8	1.72944
nG'	434.1	
nh	404.7	1.73545
ni	365.0	1.74572

分散式の常数 Constans of Dispersion Formula	
A0	2.8792047
A1	$-1.4691398 \times 10^{-2}$
A2	1.9634857×10^{-2}
A3	4.0365150×10^{-4}
A4	$-1.2936634 \times 10^{-6}$
A5	2.2997241×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0240
Δθ C,A'	0.0054
Δθ g,d	-0.0119
Δθ g,F	-0.0101
Δθ i,g	-0.0419

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.01087	0.00459	0.00402	0.00718
θ C,t	θ C,A'	θ d,C	θ e,C
0.822	0.347	0.304	0.543
ng-nd	ng-nF	nh-ng	ni-ng
0.01644	0.00723	0.00601	0.01628
θ g,d	θ g,F	θ h,g	θ i,g
1.243	0.546	0.454	1.231
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.01152	0.00653	0.00681	0.02275
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.864	0.490	0.510	1.705

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 746 (7)	転移点 Tg (℃) Transformation Point 660
ビッカース硬さ Hv Vickers Hardness 756	屈伏点 At (℃) Yielding Point 683
磨耗度 Ha Abrasion 70	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 75
ヤング率 E (10^8N/m^2) Young's Modulus 1190	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 459	
ポアソン比 σ Poisson Ratio 0.296	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 38/31
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.79
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.03 7	
320	0.12 6	
330	0.27 0	0.03 7
340	0.44 2	0.13 0
350	0.60 6	0.28 6
360	0.74 3	0.47 7
370	0.83 5	0.63 8
380	0.89 4	0.75 6
390	0.92 9	0.83 2
400	0.94 8	0.87 7
420	0.96 7	0.92 0
440	0.97 4	0.93 7
460	0.97 7	0.94 4
480	0.98 2	0.95 7
500	0.98 5	0.96 4
550	0.98 8	0.97 1
600	0.99 0	0.97 5
650	0.99 1	0.97 8
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 1	0.93 0

691548 Schott Type K-LaK9	nd 1.69100	ν d 54.8	nF-nC 0.01262
	ne 1.69400	ν e 54.5	nF'-nC' 0.01273

屈折率 Refractive Indices		
nt	1014.0	1.67706
nA'	768.2	1.68285
nr	706.5	1.68501
nC	656.3	1.68719
nC'	643.9	1.68779
nD	589.3	1.69089
nd	587.6	1.69100
ne	546.1	1.69400
nF	486.1	1.69981
nF'	480.0	1.70052
ng	435.8	1.70671
nG'	434.1	
nh	404.7	1.71246
ni	365.0	1.72229

分散式の常数 Constans of Dispersion Formula	
A0	2.8064871
A1	$-1.2028227 \times 10^{-2}$
A2	1.8483664×10^{-2}
A3	4.7321165×10^{-4}
A4	$-1.8307714 \times 10^{-5}$
A5	1.1824166×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0011
$\Delta\theta$ C,A'	0.0014
$\Delta\theta$ g,d	−0.0080
$\Delta\theta$ g,F	−0.0085
$\Delta\theta$ i,g	−0.0312

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.01013	0.00434	0.00381	0.00681
θ C,t	θ C,A'	θ d,C	θ e,C
0.803	0.344	0.302	0.540
ng-nd	ng-nF	nh-ng	ni-ng
0.01571	0.00690	0.00575	0.01558
θ g,d	θ g,F	θ h,g	θ i,g
1.245	0.547	0.456	1.235
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.01073	0.00621	0.00652	0.02177
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.843	0.488	0.512	1.710

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 559 (6)	転移点 Tg (℃) Transformation Point 651
ビッカース硬さ Hv Vickers Hardness 695	屈伏点 At (℃) Yielding Point 679
磨耗度 Ha Abrasion 130	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 86
ヤング率 E (10^8N/m^2) Young's Modulus 943	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 366	
ポアソン比 σ Poisson Ratio 0.289	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 2	着色度 C Color Degree 37/31
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 4.06
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.05 1	
320	0.23 9	0.02 7
330	0.45 3	0.13 8
340	0.63 3	0.31 9
350	0.77 3	0.52 5
360	0.85 5	0.67 6
370	0.91 6	0.80 4
380	0.94 6	0.87 2
390	0.96 2	0.90 8
400	0.97 1	0.93 0
420	0.97 7	0.94 4
440	0.98 3	0.95 8
460	0.98 4	0.96 1
480	0.98 5	0.96 5
500	0.98 8	0.97 2
550	0.99 0	0.97 5
600	0.99 2	0.98 2
650	0.99 2	0.98 2
700	0.99 5	0.98 9
800	0.99 7	0.99 2
1060	0.99 8	0.99 6
1500	0.99 2	0.98 2
2000	0.96 2	0.91 0

720503 Schott Type K-LaK10	nd 1.72000	ν d 50.3	nF-nC 0.01431
	ne 1.72342	ν e 50.1	nF'-nC' 0.01445

屈折率 Refractive Indices		
nt	1014.0	1.70455
nA'	768.2	1.71085
nr	706.5	1.71327
nC	656.3	1.71569
nC'	643.9	1.71638
nD	589.3	1.71988
nd	587.6	1.72000
ne	546.1	1.72342
nF	486.1	1.73000
nF'	480.0	1.73083
ng	435.8	1.73793
nG'	434.1	
nh	404.7	1.74456
ni	365.0	1.75590

分散式の常数 Constans of Dispersion Formula	
A0	2.8932592
A1	$-1.0286232 \times 10^{-2}$
A2	2.3502434×10^{-2}
A3	$-1.3048628 \times 10^{-4}$
A4	8.2468965×10^{-5}
A5	$-3.9764808 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0024
$\Delta\theta$ C,A'	0.0009
$\Delta\theta$ g,d	−0.0087
$\Delta\theta$ g,F	−0.0077
$\Delta\theta$ i,g	−0.0444

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.01114	0.00484	0.00431	0.00773
θ C,t	θ C,A'	θ d,C	θ e,C
0.778	0.338	0.301	0.540
ng-nd	ng-nF	nh-ng	ni-ng
0.01793	0.00793	0.00663	0.01797
θ g,d	θ g,F	θ h,g	θ i,g
1.253	0.554	0.463	1.256
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.01183	0.00704	0.00741	0.02507
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.819	0.487	0.513	1.735

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 556 (6)	転移点 Tg (℃) Transformation Point 657
ビッカース硬さ Hv Vickers Hardness 664	屈伏点 At (℃) Yielding Point 698
磨耗度 Ha Abrasion 130	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 86
ヤング率 E (10^8N/m^2) Young's Modulus 970	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 380	
ポアソン比 σ Poisson Ratio 0.275	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 37/32
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 4.08
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.00 5	
320	0.07 9	
330	0.36 6	0.08 1
340	0.49 8	0.17 5
350	0.68 3	0.38 5
360	0.80 3	0.57 5
370	0.88 5	0.73 7
380	0.93 0	0.83 4
390	0.95 3	0.88 8
400	0.96 4	0.91 4
420	0.97 8	0.94 8
440	0.98 1	0.95 4
460	0.98 3	0.95 8
480	0.98 5	0.96 5
500	0.98 8	0.97 2
550	0.99 1	0.97 9
600	0.99 2	0.98 2
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 2	0.98 2
2000	0.96 4	0.91 4

658573 Schott Type K-LaK11	nd 1.65830	νd 57.3	nF-nC 0.01149
	ne 1.66105	νe 57.0	nF'-nC' 0.01159

屈折率 Refractive Indices		
nt	1014.0	1.64548
nA'	768.2	1.65084
nr	706.5	1.65283
nC	656.3	1.65481
nC'	643.9	1.65537
nD	589.3	1.65820
nd	587.6	1.65830
ne	546.1	1.66105
nF	486.1	1.66630
nF'	480.0	1.66696
ng	435.8	1.67257
nG'	434.1	
nh	404.7	1.67777
ni	365.0	1.68665

分散式の常数 Constans of Dispersion Formula	
A0	2.7018666
A1	$-1.0913442 \times 10^{-2}$
A2	1.7216977×10^{-2}
A3	2.1856992×10^{-4}
A4	6.9561279×10^{-6}
A5	$-3.1596063 \times 10^{-8}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	−0.0015
Δθ C,A'	0.0001
Δθ g,d	−0.0058
Δθ g,F	−0.0058
Δθ i,g	−0.0207

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.00933	0.00397	0.00349	0.00624
θ C,t	θ C,A'	θ d,C	θ e,C
0.812	0.346	0.304	0.543
ng-nd	ng-nF	nh-ng	ni-ng
0.01427	0.00627	0.00520	0.01408
θ g,d	θ g,F	θ h,g	θ i,g
1.242	0.546	0.453	1.225
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.00989	0.00568	0.00591	0.01969
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.853	0.490	0.510	1.700

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 542 (5)	転移点 Tg (℃) Transformation Point 639
ビッカース硬さ Hv Vickers Hardness 639	屈伏点 At (℃) Yielding Point 678
磨耗度 Ha Abrasion 160	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 85
ヤング率 E (10^8N/m^2) Young's Modulus 899	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 355	
ポアソン比 σ Poisson Ratio 0.266	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 3	着色度 C Color Degree 36/29
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.85
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280	0.01 2	
290	0.06 9	
300	0.18 3	0.01 4
310	0.34 5	0.06 9
320	0.50 0	0.17 7
330	0.66 6	0.36 3
340	0.77 8	0.53 4
350	0.86 4	0.69 5
360	0.91 6	0.80 4
370	0.94 8	0.87 5
380	0.96 4	0.91 4
390	0.97 1	0.93 1
400	0.98 0	0.95 1
420	0.98 3	0.95 8
440	0.98 5	0.96 5
460	0.98 8	0.97 2
480	0.99 0	0.97 5
500	0.99 0	0.97 5
550	0.99 2	0.98 2
600	0.99 4	0.98 5
650	0.99 5	0.99 1
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 7	0.99 2
1500	0.99 0	0.97 5
2000	0.96 0	0.90 4

678555 Schott Type K-LaK12	nd 1.67790	ν d 55.5	nF-nC 0.01221
	ne 1.68082	ν e 55.2	nF'-nC' 0.01233

屈折率 Refractive Indices		
nt	1014.0	1.66438
nA'	768.2	1.67000
nr	706.5	1.67210
nC	656.3	1.67421
nC'	643.9	1.67480
nD	589.3	1.67780
nd	587.6	1.67790
ne	546.1	1.68082
nF	486.1	1.68642
nF'	480.0	1.68713
ng	435.8	1.69311
nG'	434.1	
nh	404.7	1.69868
ni	365.0	1.70813

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.00983	0.00421	0.00369	0.00661
θ C,t	θ C,A'	θ d,C	θ e,C
0.805	0.345	0.302	0.541
ng-nd	ng-nF	nh-ng	ni-ng
0.01521	0.00669	0.00557	0.01502
θ g,d	θ g,F	θ h,g	θ i,g
1.246	0.548	0.456	1.230
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.01042	0.00602	0.00631	0.02100
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.845	0.488	0.512	1.703

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.02 2	
320	0.13 8	
330	0.35 0	0.07 2
340	0.56 0	0.23 5
350	0.72 7	0.45 0
360	0.83 5	0.63 8
370	0.90 5	0.78 0
380	0.94 0	0.85 7
390	0.96 0	0.90 3
400	0.97 1	0.93 0
420	0.98 1	0.95 4
440	0.98 1	0.95 4
460	0.98 5	0.96 4
480	0.98 5	0.96 4
500	0.98 8	0.97 1
550	0.99 0	0.97 5
600	0.99 2	0.98 2
650	0.99 4	0.98 5
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 7	0.99 2
2000	0.97 1	0.93 0

分散式の常数 Constans of Dispersion Formula	
A0	2.7624188
A1	$-1.0720420 \times 10^{-2}$
A2	1.9279626×10^{-2}
A3	$-3.7377214 \times 10^{-5}$
A4	5.4439104×10^{-5}
A5	$-2.8035955 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0001
$\Delta\theta$ C,A'	0.0014
$\Delta\theta$ g,d	−0.0056
$\Delta\theta$ g,F	−0.0062
$\Delta\theta$ i,g	−0.0297

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 539 (5)	転移点 Tg (℃) Transformation Point 653
ビッカース硬さ Hv Vickers Hardness 638	屈伏点 At (℃) Yielding Point 689
磨耗度 Ha Abrasion 150	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 81
ヤング率 E (10^8N/m^2) Young's Modulus 921	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 363	
ポアソン比 σ Poisson Ratio 0.269	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 3	着色度 C Color Degree 37/31
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 3.98
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

694534 Schott Type K-LaK13	nd	1.69350	ν d	53.4	nF-nC 0.01299
	ne	1.69661	ν e	53.1	nF'-nC' 0.01312

屈折率 Refractive Indices		
nt	1014.0	1.67934
nA'	768.2	1.68516
nr	706.5	1.68736
nC	656.3	1.68959
nC'	643.9	1.69022
nD	589.3	1.69340
nd	587.6	1.69350
ne	546.1	1.69661
nF	486.1	1.70258
nF'	480.0	1.70334
ng	435.8	1.70974
nG'	434.1	
nh	404.7	1.71572
ni	365.0	1.72597

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.01025	0.00443	0.00391	0.00702
θ C,t	θ C,A'	θ d,C	θ e,C
0.789	0.341	0.301	0.540
ng-nd	ng-nF	nh-ng	ni-ng
0.01624	0.00716	0.00598	0.01623
θ g,d	θ g,F	θ h,g	θ i,g
1.250	0.551	0.460	1.249
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.01088	0.00639	0.00673	0.02263
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.829	0.487	0.513	1.725

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.13 0	
330	0.40 3	0.10 3
340	0.65 0	0.34 1
350	0.79 9	0.57 1
360	0.88 3	0.73 3
370	0.93 3	0.84 2
380	0.96 0	0.90 3
390	0.97 1	0.93 0
400	0.97 8	0.94 7
420	0.98 5	0.96 4
440	0.98 5	0.96 4
460	0.99 0	0.97 5
480	0.99 0	0.97 5
500	0.99 0	0.97 5
550	0.99 2	0.98 2
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 5	0.98 9
2000	0.97 1	0.93 0

分散式の常数 Constans of Dispersion Formula	
A0	2.8106459
A1	$-1.0211215 \times 10^{-2}$
A2	2.0473010×10^{-2}
A3	9.7897189×10^{-5}
A4	3.3789330×10^{-5}
A5	$-1.1893964 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	-0.0062
$\Delta\theta$ C,A'	0.0001
$\Delta\theta$ g,d	-0.0054
$\Delta\theta$ g,F	-0.0061
$\Delta\theta$ i,g	-0.0270

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 560 (6)	転移点 Tg (℃) Transformation Point 648
ビッカース硬さ Hv Vickers Hardness 623	屈伏点 At (℃) Yielding Point 683
磨耗度 Ha Abrasion 160	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 89
ヤング率 E (10^8N/m^2) Young's Modulus 899	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 353	
ポアソン比 σ Poisson Ratio 0.274	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 37/32
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 4.11
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

697556 Schott Type	nd 1.69680	ν d 55.6	nF−nC 0.01253
K-LaK14	ne 1.69978	ν e 55.5	nF'−nC' 0.01262

屈折率 Refractive Indices		
nt	1014.0	1.68272
nA'	768.2	1.68864
nr	706.5	1.69082
nC	656.3	1.69299
nC'	643.9	1.69361
nD	589.3	1.69669
nd	587.6	1.69680
ne	546.1	1.69978
nF	486.1	1.70552
nF'	480.0	1.70623
ng	435.8	1.71231
nG'	434.1	
nh	404.7	1.71798
ni	365.0	1.72764

分散式の常数 Constans of Dispersion Formula	
A0	2.8259946
A1	−1.2901534 ×10 $^{-2}$
A2	1.9085857 ×10 $^{-2}$
A3	2.6486421 ×10 $^{-4}$
A4	2.7706905 ×10 $^{-6}$
A5	3.5443411 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
Δ θ C,t	0.0140
Δ θ C,A'	0.0037
Δ θ g,d	−0.0133
Δ θ g,F	−0.0121
Δ θ i,g	−0.0357

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01027	0.00435	0.00381	0.00679
θ C,t	θ C,A'	θ d,C	θ e,C
0.820	0.347	0.304	0.542
ng−nd	ng−nF	nh−ng	ni−ng
0.01551	0.00679	0.00567	0.01533
θ g,d	θ g,F	θ h,g	θ i,g
1.238	0.542	0.453	1.223
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01089	0.00617	0.00645	0.02141
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.863	0.489	0.511	1.697

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 634 (6)	転移点 Tg (℃) Transformation Point 668
ビッカース硬さ Hv Vickers Hardness 712	屈伏点 At (℃) Yielding Point 693
磨耗度 Ha Abrasion 90	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 81
ヤング率 E (10^{8}N/m^2) Young's Modulus 1119	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 434	
ポアソン比 σ Poisson Ratio 0.289	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 37/31
耐酸性(粉末法) RA Acid Resistance 5	比重 S.g Specific Gravity 3.64
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.05 $_4$	
320	0.17 $_0$	0.01 $_2$
330	0.34 $_0$	0.06 $_7$
340	0.52 $_8$	0.20 $_3$
350	0.68 $_2$	0.38 $_4$
360	0.79 $_5$	0.56 $_4$
370	0.87 $_3$	0.71 $_4$
380	0.90 $_0$	0.77 $_0$
390	0.91 $_8$	0.80 $_7$
400	0.95 $_7$	0.89 $_6$
420	0.96 $_8$	0.92 $_3$
440	0.97 $_5$	0.94 $_0$
460	0.98 $_0$	0.95 $_0$
480	0.98 $_2$	0.95 $_7$
500	0.98 $_5$	0.96 $_4$
550	0.98 $_5$	0.96 $_4$
600	0.99 $_0$	0.97 $_5$
650	0.99 $_1$	0.97 $_8$
700	0.99 $_4$	0.98 $_5$
800	0.99 $_7$	0.99 $_2$
1060	0.99 $_7$	0.99 $_2$
1500	0.99 $_7$	0.99 $_2$
2000	0.96 $_8$	0.92 $_3$

729547 Schott Type	nd 1.72916	ν d 54.7	nF−nC 0.01334
K-LaK18	ne 1.73234	ν e 54.5	nF'−nC' 0.01344

屈折率 Refractive Indices		
nt	1014.0	1.71407
nA'	768.2	1.72045
nr	706.5	1.72278
nC	656.3	1.72510
nC'	643.9	1.72576
nD	589.3	1.72905
nd	587.6	1.72916
ne	546.1	1.73234
nF	486.1	1.73844
nF'	480.0	1.73920
ng	435.8	1.74569
nG'	434.1	
nh	404.7	1.75172
ni	365.0	1.76202

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01103	0.00465	0.00406	0.00724
θ C,t	θ C,A'	θ d,C	θ e,C
0.827	0.349	0.304	0.543
ng−nd	ng−nF	nh−ng	ni−ng
0.01653	0.00725	0.00603	0.01633
θ g,d	θ g,F	θ h,g	θ i,g
1.239	0.543	0.452	1.224
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01169	0.00658	0.00686	0.02282
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.870	0.490	0.510	1.698

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290	0.02 2	
300	0.05 8	
310	0.10 0	0.00 3
320	0.24 6	0.03 0
330	0.39 8	0.10 0
340	0.55 4	0.22 9
350	0.69 4	0.40 2
360	0.79 9	0.57 1
370	0.87 3	0.71 4
380	0.92 2	0.81 7
390	0.94 7	0.87 4
400	0.96 5	0.91 6
420	0.97 8	0.94 7
440	0.98 2	0.95 7
460	0.98 5	0.96 4
480	0.98 8	0.97 1
500	0.99 0	0.97 5
550	0.99 1	0.97 8
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 5	0.98 9
2000	0.95 4	0.89 0

分散式の常数 Constans of Dispersion Formula	
A0	2.9326458
A1	−1.4635981 ×10 −2
A2	2.0783320 ×10 −2
A3	2.2171230 ×10 −4
A4	1.5404207 ×10 −5
A5	−3.0668905 ×10 −7

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0256
$\Delta\theta$ C,A'	0.0062
$\Delta\theta$ g,d	−0.0139
$\Delta\theta$ g,F	−0.0119
$\Delta\theta$ i,g	−0.0424

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 600 (6)	転移点 Tg (℃) Transformation Point 682
ビッカース硬さ Hv Vickers Hardness 620	屈伏点 At (℃) Yielding Point 706
磨耗度 Ha Abrasion 60	線膨張係数 $\alpha\times10^{-7}$ Thermal Expansion (100−300℃) 71
ヤング率 E (10^8N/m^2) Young's Modulus 1175	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 461	
ポアソン比 σ Poisson Ratio 0.275	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 38/30
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 4.08
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

641601 Schott Type K-LaKn2	nd 1.64050	νd 60.1	nF-nC 0.01065
	ne 1.64304	νe 60.0	nF'-nC' 0.01072

屈折率 Refractive Indices		
nt	1014.0	1.62826
nA'	768.2	1.63351
nr	706.5	1.63539
nC	656.3	1.63725
nC'	643.9	1.63778
nD	589.3	1.64041
nd	587.6	1.64050
ne	546.1	1.64304
nF	486.1	1.64790
nF'	480.0	1.64850
ng	435.8	1.65365
nG'	434.1	
nh	404.7	1.65842
ni	365.0	1.66653

分散式の常数 Constans of Dispersion Formula	
A0	2.6499061
A1	$-1.3057055 \times 10^{-2}$
A2	1.4785650×10^{-2}
A3	4.0688360×10^{-4}
A4	$-1.9033820 \times 10^{-5}$
A5	1.0427952×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0174
Δθ C,A'	0.0025
Δθ g,d	−0.0074
Δθ g,F	−0.0074
Δθ i,g	−0.0146

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.00899	0.00374	0.00325	0.00579
θ C,t	θ C,A'	θ d,C	θ e,C
0.844	0.351	0.305	0.544
ng-nd	ng-nF	nh-ng	ni-ng
0.01315	0.00575	0.00477	0.01288
θ g,d	θ g,F	θ h,g	θ i,g
1.235	0.540	0.448	1.209
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.00952	0.00526	0.00546	0.01803
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.888	0.491	0.509	1.682

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 561 (6)	転移点 Tg (℃) Transformation Point 639
ビッカース硬さ Hv Vickers Hardness 564	屈伏点 At (℃) Yielding Point 663
磨耗度 Ha Abrasion 130	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 80
ヤング率 E (10^8N/m^2) Young's Modulus 915	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 358	
ポアソン比 σ Poisson Ratio 0.278	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 4	着色度 C Color Degree 36/30
耐酸性(粉末法) RA Acid Resistance 5	比重 S.g Specific Gravity 3.66
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290	0.02 0	
300	0.08 6	
310	0.20 9	0.02 0
320	0.37 1	0.08 4
330	0.55 8	0.23 2
340	0.70 8	0.42 3
350	0.81 9	0.60 8
360	0.88 7	0.74 2
370	0.93 6	0.84 8
380	0.95 7	0.89 6
390	0.97 1	0.93 0
400	0.98 0	0.95 0
420	0.98 5	0.96 4
440	0.98 8	0.97 1
460	0.99 0	0.97 5
480	0.99 0	0.97 5
500	0.99 2	0.98 2
550	0.99 4	0.98 5
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 1	0.93 0

671572 Schott Type K-LaKn4	nd 1.67100	νd 57.2	nF-nC 0.01173
	ne 1.67380	νe 57.1	nF'-nC' 0.01181

屈折率 Refractive Indices		
nt	1014.0	1.65778
nA'	768.2	1.66336
nr	706.5	1.66541
nC	656.3	1.66743
nC'	643.9	1.66801
nD	589.3	1.67090
nd	587.6	1.67100
ne	546.1	1.67380
nF	486.1	1.67916
nF'	480.0	1.67982
ng	435.8	1.68551
nG'	434.1	
nh	404.7	1.69081
ni	365.0	1.69982

分散式の常数 Constans of Dispersion Formula	
A0	2.7438989
A1	$-1.2439716 \times 10^{-2}$
A2	1.7318651×10^{-2}
A3	3.0018664×10^{-4}
A4	$-2.6388169 \times 10^{-6}$
A5	4.3136059×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0096
Δθ C,A'	0.0017
Δθ g,d	−0.0110
Δθ g,F	−0.0103
Δθ i,g	−0.0268

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.00965	0.00407	0.00357	0.00637
θ C,t	θ C,A'	θ d,C	θ e,C
0.823	0.347	0.304	0.543
ng-nd	ng-nF	nh-ng	ni-ng
0.01451	0.00635	0.00530	0.01431
θ g,d	θ g,F	θ h,g	θ i,g
1.237	0.541	0.452	1.220
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.01023	0.00579	0.00602	0.02000
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.866	0.490	0.510	1.693

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 564 (6)	転移点 Tg (℃) Transformation Point 632
ビッカース硬さ Hv Vickers Hardness 560	屈伏点 At (℃) Yielding Point 661
磨耗度 Ha Abrasion 150	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 85
ヤング率 E (10^8N/m^2) Young's Modulus 925	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 359	
ポアソン比 σ Poisson Ratio 0.288	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 4	着色度 C Color Degree 36/31
耐酸性(粉末法) RA Acid Resistance 5	比重 S.g Specific Gravity 3.88
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.08 6	
320	0.27 4	0.03 9
330	0.49 3	0.17 1
340	0.66 5	0.36 1
350	0.79 2	0.55 9
360	0.86 9	0.70 5
370	0.92 2	0.81 7
380	0.95 0	0.88 0
390	0.96 4	0.91 3
400	0.97 1	0.93 0
420	0.98 1	0.95 4
440	0.98 2	0.95 7
460	0.98 5	0.96 4
480	0.98 8	0.97 1
500	0.99 2	0.98 2
550	0.99 4	0.98 5
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 2	0.98 2
2000	0.96 4	0.91 3

650558 Schott Type	nd 1.65000	ν d 55.8	nF-nC 0.01165
K-LaKn5	ne 1.65278	ν e 55.7	nF'-nC' 0.01172

屈折率 Refractive Indices		
nt	1014.0	1.63705
nA'	768.2	1.64246
nr	706.5	1.64448
nC	656.3	1.64646
nC'	643.9	1.64704
nD	589.3	1.64990
nd	587.6	1.65000
ne	546.1	1.65278
nF	486.1	1.65811
nF'	480.0	1.65876
ng	435.8	1.66448
nG'	434.1	
nh	404.7	1.66979
ni	365.0	1.67893

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.00941	0.00400	0.00354	0.00632
θ C,t	θ C,A'	θ d,C	θ e,C
0.808	0.343	0.304	0.542
ng-nd	ng-nF	nh-ng	ni-ng
0.01448	0.00637	0.00531	0.01445
θ g,d	θ g,F	θ h,g	θ i,g
1.243	0.547	0.456	1.240
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.00999	0.00574	0.00598	0.02017
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.852	0.490	0.510	1.721

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.13 0	
340	0.43 6	0.12 6
350	0.70 1	0.41 1
360	0.84 6	0.65 9
370	0.92 2	0.81 7
380	0.96 0	0.90 3
390	0.97 8	0.94 7
400	0.98 8	0.97 1
420	0.99 7	0.99 2
440	0.99 7	0.99 2
460	0.99 7	0.99 2
480	0.99 8	0.99 6
500	0.99 8	0.99 6
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 0	0.97 5
1500	0.98 5	0.96 4
2000	0.96 0	0.90 3

分散式の常数 Constans of Dispersion Formula	
A0	2.6750997
A1	$-1.1431427 \times 10^{-2}$
A2	1.6688192×10^{-2}
A3	3.8837475×10^{-4}
A4	$-1.3937879 \times 10^{-5}$
A5	1.2576508×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0012
$\Delta\theta$ C,A'	-0.0003
$\Delta\theta$ g,d	-0.0079
$\Delta\theta$ g,F	-0.0069
$\Delta\theta$ i,g	-0.0174

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 595 (6)	転移点 Tg (℃) Transformation Point 643
ビッカース硬さ Hv Vickers Hardness 584	屈伏点 At (℃) Yielding Point 668
磨耗度 Ha Abrasion 140	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 80
ヤング率 E (10^8N/m^2) Young's Modulus 919	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 360	
ポアソン比 σ Poisson Ratio 0.278	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 3	着色度 C Color Degree 37/33
耐酸性(粉末法) RA Acid Resistance 5	比重 S.g Specific Gravity 3.71
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

670517 Schott Type	nd 1.67000	ν d 51.7	nF−nC 0.01295
K-LaKn7	ne 1.67308	ν e 51.5	nF'−nC' 0.01308

屈折率 Refractive Indices		
nt	1014.0	1.65593
nA'	768.2	1.66170
nr	706.5	1.66389
nC	656.3	1.66610
nC'	643.9	1.66671
nD	589.3	1.66988
nd	587.6	1.67000
ne	546.1	1.67308
nF	486.1	1.67905
nF'	480.0	1.67979
ng	435.8	1.68622
nG'	434.1	
nh	404.7	1.69224
ni	365.0	1.70269

分散式の常数 Constans of Dispersion Formula	
A0	2.7334938
A1	−1.0297317 ×10 $^{-2}$
A2	1.9448887 ×10 $^{-2}$
A3	2.9196609 ×10 $^{-4}$
A4	4.4649792 ×10 $^{-6}$
A5	8.5785598 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
Δ θ C,t	−0.0022
Δ θ C,A'	0.0008
Δ θ g,d	−0.0064
Δ θ g,F	−0.0061
Δ θ i,g	−0.0174

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01017	0.00440	0.00390	0.00698
θ C,t	θ C,A'	θ d,C	θ e,C
0.785	0.340	0.301	0.539
ng−nd	ng−nF	nh−ng	ni−ng
0.01622	0.00717	0.00602	0.01647
θ g,d	θ g,F	θ h,g	θ i,g
1.253	0.554	0.465	1.272
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01078	0.00637	0.00671	0.02290
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.824	0.487	0.513	1.751

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 546 (5)	転移点 Tg (℃) Transformation Point 634
ビッカース硬さ Hv Vickers Hardness 557	屈伏点 At (℃) Yielding Point 668
磨耗度 Ha Abrasion 170	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 85
ヤング率 E (10^{8}N/m^2) Young's Modulus 916	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 357	
ポアソン比 σ Poisson Ratio 0.284	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 38/34
耐酸性(粉末法) RA Acid Resistance 5	比重 S.g Specific Gravity 3.78
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.15 $_4$	
350	0.50 $_5$	0.18 $_1$
360	0.74 $_2$	0.47 $_5$
370	0.86 $_7$	0.70 $_0$
380	0.92 $_2$	0.81 $_7$
390	0.94 $_8$	0.87 $_7$
400	0.96 $_3$	0.91 $_0$
420	0.97 $_4$	0.93 $_7$
440	0.97 $_8$	0.94 $_7$
460	0.98 $_2$	0.95 $_7$
480	0.98 $_5$	0.96 $_4$
500	0.98 $_8$	0.97 $_1$
550	0.99 $_0$	0.97 $_5$
600	0.99 $_2$	0.98 $_2$
650	0.99 $_5$	0.98 $_9$
700	0.99 $_7$	0.99 $_2$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_2$	0.98 $_2$
2000	0.96 $_4$	0.91 $_3$

678507 Schott Type	nd 1.67800	ν d 50.7	nF−nC 0.01336
K-LaKn8	ne 1.68119	ν e 50.4	nF'−nC' 0.01351

屈折率 Refractive Indices		
nt	1014.0	1.66354
nA'	768.2	1.66943
nr	706.5	1.67170
nC	656.3	1.67397
nC'	643.9	1.67461
nD	589.3	1.67789
nd	587.6	1.67800
ne	546.1	1.68119
nF	486.1	1.68733
nF'	480.0	1.68812
ng	435.8	1.69476
nG'	434.1	
nh	404.7	1.70104
ni	365.0	1.71190

分散式の常数 Constans of Dispersion Formula	
A0	2.7535239
A1	$-8.1090186 \times 10^{-3}$
A2	2.3317962×10^{-2}
A3	$-6.5677708 \times 10^{-4}$
A4	1.3724353×10^{-4}
A5	$-5.6352292 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0023
$\Delta\theta$ C,A'	0.0020
$\Delta\theta$ g,d	−0.0063
$\Delta\theta$ g,F	−0.0051
$\Delta\theta$ i,g	−0.0139

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01043	0.00454	0.00403	0.00722
θ C,t	θ C,A'	θ d,C	θ e,C
0.781	0.340	0.302	0.540
ng−nd	ng−nF	nh−ng	ni−ng
0.01676	0.00743	0.00628	0.01714
θ g,d	θ g,F	θ h,g	θ i,g
1.254	0.556	0.470	1.283
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01107	0.00658	0.00693	0.02378
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.819	0.487	0.513	1.760

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	568 (6)	転移点 Tg (℃) Transformation Point	636
ビッカース硬さ Hv Vickers Hardness	565	屈伏点 At (℃) Yielding Point	680
磨耗度 Ha Abrasion	160	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃)	83
ヤング率 E (10^8N/m^2) Young's Modulus	896	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	354		
ポアソン比 σ Poisson Ratio	0.265	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	38/34
耐酸性(粉末法) RA Acid Resistance	4	比重 S.g Specific Gravity	3.80
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.15 4	
350	0.48 2	0.16 1
360	0.72 7	0.45 0
370	0.85 0	0.66 7
380	0.90 9	0.78 9
390	0.94 0	0.85 7
400	0.95 7	0.89 6
420	0.97 1	0.93 0
440	0.97 7	0.94 4
460	0.98 2	0.95 7
480	0.98 5	0.96 4
500	0.98 8	0.97 1
550	0.99 1	0.97 8
600	0.99 4	0.98 5
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 2	0.98 2
2000	0.96 8	0.92 3

678533 Schott Type	nd 1.67800	ν d 53.3	nF−nC 0.01273
K-LaKn9	ne 1.68103	ν e 53.0	nF'−nC' 0.01285

屈折率 Refractive Indices		
nt	1014.0	1.66420
nA'	768.2	1.66984
nr	706.5	1.67199
nC	656.3	1.67416
nC'	643.9	1.67477
nD	589.3	1.67789
nd	587.6	1.67800
ne	546.1	1.68103
nF	486.1	1.68689
nF'	480.0	1.68762
ng	435.8	1.69389
nG'	434.1	
nh	404.7	1.69972
ni	365.0	1.70973

分散式の常数 Constans of Dispersion Formula	
A0	2.7611558
A1	−1.0039822 ×10 $^{-2}$
A2	1.8826222 ×10 $^{-2}$
A3	4.6012572 ×10 $^{-4}$
A4	−2.1153952 ×10 $^{-5}$
A5	1.6013372 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δ θ C,t	−0.0123
Δ θ C,A'	−0.0014
Δ θ g,d	−0.0076
Δ θ g,F	−0.0076
Δ θ i,g	−0.0331

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00996	0.00432	0.00384	0.00687
θ C,t	θ C,A'	θ d,C	θ e,C
0.782	0.339	0.302	0.540
ng−nd	ng−nF	nh−ng	ni−ng
0.01589	0.00700	0.00583	0.01584
θ g,d	θ g,F	θ h,g	θ i,g
1.248	0.550	0.458	1.244
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01057	0.00626	0.00659	0.02211
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.823	0.487	0.513	1.721

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 548 (5)	転移点 Tg (℃) Transformation Point 649
ビッカース硬さ Hv Vickers Hardness 575	屈伏点 At (℃) Yielding Point 683
磨耗度 Ha Abrasion 160	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 88
ヤング率 E (10^{8}N/m^2) Young's Modulus 880	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 342	
ポアソン比 σ Poisson Ratio 0.287	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 37/31
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.99
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.02 $_3$	
320	0.15 $_0$	
330	0.36 $_9$	0.08 $_2$
340	0.59 $_2$	0.26 $_9$
350	0.75 $_5$	0.49 $_6$
360	0.85 $_8$	0.68 $_3$
370	0.92 $_0$	0.81 $_3$
380	0.95 $_7$	0.89 $_6$
390	0.97 $_1$	0.93 $_0$
400	0.98 $_1$	0.95 $_4$
420	0.99 $_0$	0.97 $_5$
440	0.99 $_1$	0.97 $_8$
460	0.99 $_2$	0.98 $_2$
480	0.99 $_4$	0.98 $_5$
500	0.99 $_7$	0.99 $_2$
550	0.99 $_8$	0.99 $_6$
600	0.99 $_8$	0.99 $_6$
650	0.99 $_8$	0.99 $_6$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_4$	0.98 $_5$
1500	0.99 $_1$	0.97 $_8$
2000	0.96 $_3$	0.91 $_0$

692506 Schott Type K-LaKn10	nd 1.69200	ν d 50.6	nF-nC 0.01368
	ne 1.69526	ν e 50.3	nF'-nC' 0.01382

屈折率 Refractive Indices		
nt	1014.0	1.67729
nA'	768.2	1.68328
nr	706.5	1.68558
nC	656.3	1.68789
nC'	643.9	1.68854
nD	589.3	1.69188
nd	587.6	1.69200
ne	546.1	1.69526
nF	486.1	1.70157
nF'	480.0	1.70236
ng	435.8	1.70918
nG'	434.1	
nh	404.7	1.71557
ni	365.0	1.72662

分散式の常数 Constans of Dispersion Formula	
A0	2.8033541
A1	$-1.0283705 \times 10^{-2}$
A2	2.0811660×10^{-2}
A3	2.7625601×10^{-4}
A4	1.9775240×10^{-5}
A5	$-2.8127189 \times 10^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0073
$\Delta\theta$ C,A'	−0.0007
$\Delta\theta$ g,d	−0.0053
$\Delta\theta$ g,F	−0.0052
$\Delta\theta$ i,g	−0.0233

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.01060	0.00461	0.00411	0.00737
θ C,t	θ C,A'	θ d,C	θ e,C
0.775	0.337	0.300	0.539
ng-nd	ng-nF	nh-ng	ni-ng
0.01718	0.00761	0.00639	0.01744
θ g,d	θ g,F	θ h,g	θ i,g
1.256	0.556	0.467	1.275
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.01125	0.00672	0.00710	0.02426
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.814	0.486	0.514	1.755

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 499 (5)	転移点 Tg (℃) Transformation Point 630
ビッカース硬さ Hv Vickers Hardness 498	屈伏点 At (℃) Yielding Point 667
磨耗度 Ha Abrasion 180	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 91
ヤング率 E (10^8N/m^2) Young's Modulus 891	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 345	
ポアソン比 σ Poisson Ratio 0.291	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 37/33
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 4.07
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.05 0	
340	0.31 9	0.05 7
350	0.63 7	0.32 4
360	0.81 4	0.59 8
370	0.90 9	0.78 9
380	0.95 0	0.88 0
390	0.96 8	0.92 3
400	0.97 7	0.94 4
420	0.98 2	0.95 7
440	0.98 5	0.96 4
460	0.98 8	0.97 1
480	0.99 0	0.97 5
500	0.99 0	0.97 5
550	0.99 1	0.97 8
600	0.99 2	0.98 2
650	0.99 4	0.98 5
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.98 5	0.96 4
1500	0.98 5	0.96 4
2000	0.96 4	0.91 3

658534 Schott Type	nd 1.65830	νd 53.4	nF−nC 0.01233
K-LaKn11	ne 1.66124	νe 53.1	nF'−nC' 0.01245

屈折率 Refractive Indices

nt	1014.0	1.64477
nA'	768.2	1.65040
nr	706.5	1.65250
nC	656.3	1.65459
nC'	643.9	1.65518
nD	589.3	1.65819
nd	587.6	1.65830
ne	546.1	1.66124
nF	486.1	1.66692
nF'	480.0	1.66763
ng	435.8	1.67371
nG'	434.1	
nh	404.7	1.67942
ni	365.0	1.68927

分散式の常数 Constans of Dispersion Formula

A0	2.7026300
A1	$-1.2962817 \times 10^{-2}$
A2	1.5458160×10^{-2}
A3	1.0740632×10^{-3}
A4	$-9.6733393 \times 10^{-5}$
A5	5.3903883×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions

Δθ C,t	0.0012
Δθ C,A'	−0.0011
Δθ g,d	−0.0058
Δθ g,F	−0.0066
Δθ i,g	−0.0144

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.00982	0.00419	0.00371	0.00665
θ C,t	θ C,A'	θ d,C	θ e,C
0.796	0.340	0.301	0.539
ng−nd	ng−nF	nh−ng	ni−ng
0.01541	0.00679	0.00571	0.01556
θ g,d	θ g,F	θ h,g	θ i,g
1.250	0.551	0.463	1.262
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01041	0.00606	0.00639	0.02164
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.836	0.487	0.513	1.738

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	556 (6)	転移点 Tg (℃) Transformation Point	635
ビッカース硬さ Hv Vickers Hardness	548	屈伏点 At (℃) Yielding Point	661
磨耗度 Ha Abrasion	150	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	82
ヤング率 E (10^8N/m^2) Young's Modulus	915	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	358		
ポアソン比 σ Poisson Ratio	0.278	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	38/33
耐酸性(粉末法) RA Acid Resistance	5	比重 S.g Specific Gravity	3.75
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.02 0	
340	0.18 7	0.02 0
350	0.51 6	0.19 2
360	0.74 3	0.47 7
370	0.86 0	0.68 6
380	0.91 9	0.81 0
390	0.94 6	0.87 0
400	0.96 4	0.91 3
420	0.97 5	0.94 0
440	0.98 1	0.95 4
460	0.98 5	0.96 4
480	0.98 5	0.96 4
500	0.98 8	0.97 1
550	0.99 0	0.97 5
600	0.99 4	0.98 5
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 5	0.94 0

734512 Schott Type	nd 1.73350	ν d 51.2	nF−nC 0.01432
K-LaKn12	ne 1.73692	ν e 51.0	nF'−nC' 0.01445

屈折率 Refractive Indices		
nt	1014.0	1.71789
nA'	768.2	1.72430
nr	706.5	1.72673
nC	656.3	1.72918
nC'	643.9	1.72987
nD	589.3	1.73338
nd	587.6	1.73350
ne	546.1	1.73692
nF	486.1	1.74350
nF'	480.0	1.74432
ng	435.8	1.75137
nG'	434.1	
nh	404.7	1.75794
ni	365.0	1.76925

分散式の常数 Constans of Dispersion Formula	
A0	2.9410903
A1	$-1.1791679 \times 10^{-2}$
A2	2.2466126×10^{-2}
A3	3.4761977×10^{-4}
A4	$-1.7639536 \times 10^{-6}$
A5	1.0304373×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0033
$\Delta\theta$ C,A'	0.0024
$\Delta\theta$ g,d	−0.0120
$\Delta\theta$ g,F	−0.0109
$\Delta\theta$ i,g	−0.0446

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01129	0.00488	0.00432	0.00774
θ C,t	θ C,A'	θ d,C	θ e,C
0.788	0.341	0.302	0.541
ng−nd	ng−nF	nh−ng	ni−ng
0.01787	0.00787	0.00657	0.01788
θ g,d	θ g,F	θ h,g	θ i,g
1.248	0.550	0.459	1.249
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01198	0.00705	0.00740	0.02493
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.829	0.488	0.512	1.725

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 620 (6)	転移点 Tg (℃) Transformation Point 663
ビッカース硬さ Hv Vickers Hardness 605	屈伏点 At (℃) Yielding Point 695
磨耗度 Ha Abrasion 100	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 87
ヤング率 E (10^8N/m^2) Young's Modulus 1108	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 428	
ポアソン比 σ Poisson Ratio 0.295	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 38/31
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.92
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300	0.01 7	
310	0.07 9	
320	0.19 6	0.01 7
330	0.37 1	0.08 4
340	0.54 0	0.21 4
350	0.70 1	0.41 1
360	0.81 2	0.59 5
370	0.88 7	0.74 2
380	0.93 6	0.84 8
390	0.96 1	0.90 6
400	0.97 4	0.93 7
420	0.98 5	0.96 4
440	0.98 8	0.97 1
460	0.99 0	0.97 5
480	0.99 5	0.98 9
500	0.99 5	0.98 9
550	0.99 7	0.99 2
600	0.99 7	0.99 2
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 5	0.94 0

641568 Schott Type K-LaKn13	nd 1.64100	νd 56.8	nF-nC 0.01128
	ne 1.64369	νe 56.5	nF'-nC' 0.01139

屈折率 Refractive Indices		
nt	1014.0	1.62850
nA'	768.2	1.63370
nr	706.5	1.63565
nC	656.3	1.63758
nC'	643.9	1.63812
nD	589.3	1.64090
nd	587.6	1.64100
ne	546.1	1.64369
nF	486.1	1.64886
nF'	480.0	1.64951
ng	435.8	1.65502
nG'	434.1	
nh	404.7	1.66017
ni	365.0	1.66894

分散式の常数 Constans of Dispersion Formula	
A0	2.6463583
A1	$-1.0354365 \times 10^{-2}$
A2	1.6498511×10^{-2}
A3	2.6536060×10^{-4}
A4	3.0158827×10^{-6}
A5	1.0423582×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	−0.0063
Δθ C,A'	−0.0009
Δθ g,d	−0.0058
Δθ g,F	−0.0061
Δθ i,g	−0.0157

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.00908	0.00388	0.00342	0.00611
θ C,t	θ C,A'	θ d,C	θ e,C
0.805	0.344	0.303	0.542
ng-nd	ng-nF	nh-ng	ni-ng
0.01402	0.00616	0.00515	0.01392
θ g,d	θ g,F	θ h,g	θ i,g
1.243	0.546	0.457	1.234
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.00962	0.00557	0.00582	0.01943
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.845	0.489	0.511	1.706

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 572 (6)	転移点 Tg (℃) Transformation Point 661
ビッカース硬さ Hv Vickers Hardness 585	屈伏点 At (℃) Yielding Point 690
磨耗度 Ha Abrasion 160	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 81
ヤング率 E (10^8N/m^2) Young's Modulus 886	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 347	
ポアソン比 σ Poisson Ratio 0.275	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 36/32
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.71
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.06 9	
330	0.38 2	0.09 0
340	0.66 9	0.36 6
350	0.83 3	0.63 3
360	0.91 5	0.80 1
370	0.95 4	0.89 0
380	0.97 4	0.93 7
390	0.98 1	0.95 4
400	0.98 8	0.97 1
420	0.99 0	0.97 5
440	0.99 0	0.97 5
460	0.99 2	0.98 2
480	0.99 4	0.98 5
500	0.99 5	0.98 9
550	0.99 5	0.98 9
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 7	0.99 2
1500	0.99 7	0.99 2
2000	0.98 1	0.95 4

741527 Schott Type K-LaKn14	nd 1.74100	ν d 52.7	nF−nC 0.01407
	ne 1.74436	ν e 52.5	nF'−nC' 0.01419

屈折率 Refractive Indices		
nt	1014.0	1.72531
nA'	768.2	1.73187
nr	706.5	1.73431
nC	656.3	1.73673
nC'	643.9	1.73741
nD	589.3	1.74088
nd	587.6	1.74100
ne	546.1	1.74436
nF	486.1	1.75080
nF'	480.0	1.75160
ng	435.8	1.75848
nG'	434.1	
nh	404.7	1.76488
ni	365.0	1.77586

分散式の常数 Constans of Dispersion Formula	
A0	2.9702462
A1	$-1.4464552 \times 10^{-2}$
A2	2.1482630×10^{-2}
A3	4.6535912×10^{-4}
A4	$-1.6778433 \times 10^{-5}$
A5	1.5760726×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0196
$\Delta\theta$ C,A'	0.0053
$\Delta\theta$ g,d	−0.0146
$\Delta\theta$ g,F	−0.0125
$\Delta\theta$ i,g	−0.0465

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01142	0.00486	0.00427	0.00763
θ C,t	θ C,A'	θ d,C	θ e,C
0.812	0.345	0.303	0.542
ng−nd	ng−nF	nh−ng	ni−ng
0.01748	0.00768	0.00640	0.01738
θ g,d	θ g,F	θ h,g	θ i,g
1.242	0.546	0.455	1.235
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01210	0.00695	0.00724	0.02426
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.853	0.490	0.510	1.710

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 713 (7)	転移点 Tg (℃) Transformation Point 680
ビッカース硬さ Hv Vickers Hardness 727	屈伏点 At (℃) Yielding Point 702
磨耗度 Ha Abrasion 73	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 74
ヤング率 E (10^8N/m^2) Young's Modulus 1174	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 459	
ポアソン比 σ Poisson Ratio 0.280	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 37/29
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 4.31
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280	0.03 9	
290	0.09 6	0.00 2
300	0.19 9	0.01 7
310	0.22 8	0.02 4
320	0.47 4	0.15 5
330	0.61 4	0.29 5
340	0.73 2	0.45 8
350	0.82 3	0.61 5
360	0.88 8	0.74 3
370	0.93 1	0.83 5
380	0.95 6	0.89 3
390	0.97 1	0.92 8
400	0.98 0	0.94 9
420	0.98 8	0.97 0
440	0.99 2	0.98 0
460	0.99 4	0.98 5
480	0.99 6	0.98 9
500	0.99 7	0.99 2
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.96 8	0.92 3

755524	nd 1.75500	ν d 52.4	nF−nC 0.01442
K-LaSKn1	ne 1.75843	ν e 52.1	nF'−nC' 0.01456

屈折率 Refractive Indices

nt	1014.0	1.73893
nA'	768.2	1.74566
nr	706.5	1.74815
nC	656.3	1.75063
nC'	643.9	1.75132
nD	589.3	1.75487
nd	587.6	1.75500
ne	546.1	1.75843
nF	486.1	1.76505
nF'	480.0	1.76588
ng	435.8	1.77294
nG'	434.1	
nh	404.7	1.77952
ni	365.0	1.79083

分散式の常数 Constans of Dispersion Formula

A0	3.0196879
A1	$-1.6165878 \times 10^{-2}$
A2	2.0547347×10^{-2}
A3	9.4212627×10^{-4}
A4	$-7.5208331 \times 10^{-5}$
A5	4.4263390×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0209
$\Delta\theta$ C,A'	0.0049
$\Delta\theta$ g,d	−0.0135
$\Delta\theta$ g,F	−0.0117
$\Delta\theta$ i,g	−0.0437

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01170	0.00497	0.00437	0.00780
θ C,t	θ C,A'	θ d,C	θ e,C
0.811	0.345	0.303	0.541
ng−nd	ng−nF	nh−ng	ni−ng
0.01794	0.00789	0.00658	0.01789
θ g,d	θ g,F	θ h,g	θ i,g
1.244	0.547	0.456	1.241
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01239	0.00711	0.00745	0.02495
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.851	0.488	0.512	1.714

機械的性質 Mechanical Properties

ヌープ硬さ Hk
Knoop Hardness 696 (7)

ビッカース硬さ Hv
Vickers Hardness 681

磨耗度 Ha
Abrasion 64

ヤング率 E (10^8N/m^2)
Young's Modulus 1136

剛性率 G (10^8N/m^2)
Modulus of Rigidity 443

ポアソン比 σ
Poisson Ratio 0.283

化学的性質 Chemical Properties

耐水性(粉末法) RW
Water Resistance 1

耐酸性(粉末法) RA
Acid Resistance 4

耐候性(表面法) DW
Weather Resistance 1

熱的性質 Thermal Properties

転移点 Tg (℃)
Transformation Point 693

屈伏点 At (℃)
Yielding Point 712

線膨張係数 $\alpha \times 10^{-7}$
Thermal Expansion
(100−300℃) 70

備考 Remark s

その他 Other Properties

泡 B
Bubbles

着色度 C
Color Degree 38/29

比重 S.g
Specific Gravity 4.51

脈理 S
Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280	0.00 5	
290	0.06 4	
300	0.13 3	
310	0.20 1	0.01 8
320	0.37 3	0.08 5
330	0.51 6	0.19 2
340	0.65 4	0.34 6
350	0.76 7	0.51 6
360	0.85 3	0.67 2
370	0.90 8	0.78 6
380	0.94 3	0.86 4
390	0.96 4	0.91 3
400	0.97 7	0.94 4
420	0.99 0	0.97 5
440	0.99 2	0.98 2
460	0.99 8	0.99 6
480	0.99 8	0.99 6
500	0.99 8	0.99 6
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 5	0.98 9
2000	0.96 1	0.90 6

744449 Schott Type	nd 1.74400	ν d 44.9	nF−nC 0.01658
K-LaF2	ne 1.74794	ν e 44.6	nF'−nC' 0.01678

屈折率 Refractive Indices		
nt	1014.0	1.72651
nA'	768.2	1.73356
nr	706.5	1.73628
nC	656.3	1.73907
nC'	643.9	1.73984
nD	589.3	1.74386
nd	587.6	1.74400
ne	546.1	1.74794
nF	486.1	1.75565
nF'	480.0	1.75662
ng	435.8	1.76502
nG'	434.1	
nh	404.7	1.77299
ni	365.0	1.78707

分散式の常数 Constans of Dispersion Formula	
A0	2.9687813
A1	$-1.2117585 \times 10^{-2}$
A2	2.4462371×10^{-2}
A3	7.9112124×10^{-4}
A4	$-3.3978917 \times 10^{-5}$
A5	3.9862263×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0020
$\Delta\theta$ C,A'	0.0013
$\Delta\theta$ g,d	−0.0048
$\Delta\theta$ g,F	−0.0048
$\Delta\theta$ i,g	−0.0125

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01256	0.00551	0.00493	0.00887
θ C,t	θ C,A'	θ d,C	θ e,C
0.758	0.332	0.297	0.535
ng−nd	ng−nF	nh−ng	ni−ng
0.02102	0.00937	0.00797	0.02205
θ g,d	θ g,F	θ h,g	θ i,g
1.268	0.565	0.481	1.330
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01333	0.00810	0.00868	0.03045
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.794	0.483	0.517	1.815

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 615 (6)	転移点 Tg (℃) Transformation Point 648
ビッカース硬さ Hv Vickers Hardness 621	屈伏点 At (℃) Yielding Point 686
磨耗度 Ha Abrasion 130	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 86
ヤング率 E (10^8N/m^2) Young's Modulus 1021	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 397	
ポアソン比 σ Poisson Ratio 0.276	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 39/34
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 4.03
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.02 7	
350	0.27 9	0.04 1
360	0.60 6	0.28 6
370	0.79 5	0.56 4
380	0.88 2	0.73 0
390	0.92 5	0.82 3
400	0.94 7	0.87 4
420	0.96 7	0.92 0
440	0.97 4	0.93 7
460	0.97 8	0.94 7
480	0.98 2	0.95 7
500	0.98 5	0.96 4
550	0.99 0	0.97 5
600	0.99 2	0.98 2
650	0.99 4	0.98 5
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 4	0.93 7

717479 Schott Type	nd 1.71700	ν d 47.9	nF−nC 0.01498
K-LaF3	ne 1.72056	ν e 47.6	nF'−nC' 0.01515

屈折率 Refractive Indices		
nt	1014.0	1.70096
nA'	768.2	1.70750
nr	706.5	1.71000
nC	656.3	1.71252
nC'	643.9	1.71323
nD	589.3	1.71687
nd	587.6	1.71700
ne	546.1	1.72056
nF	486.1	1.72750
nF'	480.0	1.72838
ng	435.8	1.73587
nG'	434.1	
nh	404.7	1.74297
ni	365.0	1.75534

分散式の常数 Constans of Dispersion Formula	
A0	2.8849358
A1	$-1.2668322 \times 10^{-2}$
A2	2.1170498×10^{-2}
A3	8.5117754×10^{-4}
A4	$-4.9024820 \times 10^{-5}$
A5	3.7361709×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0022
$\Delta\theta$ C,A'	0.0006
$\Delta\theta$ g,d	−0.0069
$\Delta\theta$ g,F	−0.0068
$\Delta\theta$ i,g	−0.0195

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01156	0.00502	0.00448	0.00804
θ C,t	θ C,A'	θ d,C	θ e,C
0.772	0.335	0.299	0.537
ng−nd	ng−nF	nh−ng	ni−ng
0.01887	0.00837	0.00710	0.01947
θ g,d	θ g,F	θ h,g	θ i,g
1.260	0.559	0.474	1.300
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01227	0.00733	0.00782	0.02696
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.810	0.484	0.516	1.780

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	555 (6)	転移点 Tg (℃) Transformation Point	637
ビッカース硬さ Hv Vickers Hardness	575	屈伏点 At (℃) Yielding Point	675
磨耗度 Ha Abrasion	160	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	87
ヤング率 E (10^8N/m^2) Young's Modulus	946	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	371		
ポアソン比 σ Poisson Ratio	0.275	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	38/34
耐酸性(粉末法) RA Acid Resistance	4	比重 S.g Specific Gravity	4.05
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.15 4	
350	0.48 2	0.16 1
360	0.74 6	0.48 1
370	0.86 7	0.70 0
380	0.92 0	0.81 3
390	0.94 6	0.87 0
400	0.95 7	0.89 6
420	0.96 8	0.92 3
440	0.97 1	0.93 0
460	0.97 7	0.94 4
480	0.98 1	0.95 4
500	0.98 5	0.96 4
550	0.98 8	0.97 1
600	0.98 8	0.97 1
650	0.99 1	0.97 8
700	0.99 4	0.98 5
800	0.99 8	0.99 6
1060	0.99 7	0.99 2
1500	0.99 4	0.98 5
2000	0.97 1	0.93 0

750350 Schott Type	nd 1.74950	νd 35.0	nF−nC 0.02141
LaF70	ne 1.75457	νe 34.8	nF'−nC' 0.02170

屈折率 Refractive Indices

nt	1014.0	1.72767
nA'	768.2	1.73630
nr	706.5	1.73971
nC	656.3	1.74320
nC'	643.9	1.74419
nD	589.3	1.74931
nd	587.6	1.74950
ne	546.1	1.75457
nF	486.1	1.76461
nF'	480.0	1.76589
ng	435.8	1.77708
nG'	434.1	
nh	404.7	1.78791
ni	365.0	

分散式の常数 Constans of Dispersion Formula

A0	2.9673854
A1	$-1.2979353 \times 10^{-2}$
A2	3.0585570×10^{-2}
A3	1.1409521×10^{-3}
A4	$-3.3672625 \times 10^{-5}$
A5	6.9733679×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions

Δθ C,t	0.0159
Δθ C,A'	0.0031
Δθ g,d	−0.0040
Δθ g,F	−0.0022
Δθ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01553	0.00690	0.00630	0.01137
θ C,t	θ C,A'	θ d,C	θ e,C
0.725	0.322	0.294	0.531
ng−nd	ng−nF	nh−ng	ni−ng
0.02758	0.01247	0.01083	
θ g,d	θ g,F	θ h,g	θ i,g
1.288	0.582	0.506	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01652	0.01038	0.01132	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.761	0.478	0.522	

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	473 (5)
ビッカース硬さ Hv Vickers Hardness	506
磨耗度 Ha Abrasion	150
ヤング率 E (10^8N/m^2) Young's Modulus	774
剛性率 G (10^8N/m^2) Modulus of Rigidity	305
ポアソン比 σ Poisson Ratio	0.268

化学的性質 Chemical Properties

耐水性(粉末法) RW Water Resistance	1
耐酸性(粉末法) RA Acid Resistance	5
耐候性(表面法) DW Weather Resistance	1

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	506
屈伏点 At (℃) Yielding Point	539
線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃)	69
備考 Remark s	

その他 Other Properties

泡 B Bubbles	
着色度 C Color Degree	41/34
比重 S.g Specific Gravity	4.40
脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.01 3	
350	0.17 0	0.01 2
360	0.41 4	0.11 0
370	0.61 9	0.30 1
380	0.75 3	0.49 2
390	0.83 9	0.64 6
400	0.89 4	0.75 6
420	0.95 0	0.88 0
440	0.97 1	0.93 0
460	0.97 8	0.94 7
480	0.98 2	0.95 7
500	0.98 5	0.96 4
550	0.98 8	0.97 1
600	0.99 0	0.97 5
650	0.99 2	0.98 2
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.99 6	0.99 2
1500	0.98 5	0.96 4
2000	0.98 0	0.95 2

685492 Schott Type	nd 1.68500	νd 49.2	nF−nC 0.01392
K-LaFn1	ne 1.68831	νe 48.9	nF'−nC' 0.01407

屈折率 Refractive Indices		
nt	1014.0	1.67008
nA'	768.2	1.67618
nr	706.5	1.67850
nC	656.3	1.68083
nC'	643.9	1.68149
nD	589.3	1.68488
nd	587.6	1.68500
ne	546.1	1.68831
nF	486.1	1.69475
nF'	480.0	1.69556
ng	435.8	1.70253
nG'	434.1	
nh	404.7	1.70910
ni	365.0	1.72058

分散式の常数 Constans of Dispersion Formula	
A0	2.7831037
A1	−1.2354306 ×10 $^{-2}$
A2	1.8328162 ×10 $^{-2}$
A3	1.0714523 ×10 $^{-3}$
A4	−8.5608858 ×10 $^{-5}$
A5	5.4247225 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	−0.0035
Δθ C,A'	−0.0020
Δθ g,d	−0.0046
Δθ g,F	−0.0046
Δθ i,g	−0.0121

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01075	0.00465	0.00417	0.00748
θ C,t	θ C,A'	θ d,C	θ e,C
0.772	0.334	0.300	0.537
ng−nd	ng−nF	nh−ng	ni−ng
0.01753	0.00778	0.00657	0.01805
θ g,d	θ g,F	θ h,g	θ i,g
1.259	0.559	0.472	1.297
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01141	0.00682	0.00725	0.02502
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.811	0.485	0.515	1.778

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	544 (5)	転移点 Tg (℃) Transformation Point	652
ビッカース硬さ Hv Vickers Hardness	559	屈伏点 At (℃) Yielding Point	685
磨耗度 Ha Abrasion	150	線膨張係数 α ×10^{-7} Thermal Expansion (100-300℃)	86
ヤング率 E (10^{8}N/m^2) Young's Modulus	900	備考 Remark s	
剛性率 G (10^{8}N/m^2) Modulus of Rigidity	355		
ポアソン比 σ Poisson Ratio	0.267	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	38/34
耐酸性(粉末法) RA Acid Resistance	4	比重 S.g Specific Gravity	3.89
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.13 $_8$	
350	0.48 $_2$	0.16 $_1$
360	0.74 $_0$	0.47 $_1$
370	0.86 $_2$	0.69 $_1$
380	0.91 $_9$	0.81 $_0$
390	0.96 $_0$	0.90 $_3$
400	0.97 $_1$	0.93 $_0$
420	0.97 $_4$	0.93 $_7$
440	0.97 $_8$	0.94 $_7$
460	0.98 $_2$	0.95 $_7$
480	0.98 $_5$	0.96 $_4$
500	0.98 $_8$	0.97 $_1$
550	0.99 $_5$	0.98 $_9$
600	0.99 $_5$	0.98 $_9$
650	0.99 $_7$	0.99 $_2$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_7$	0.99 $_2$
2000	0.97 $_7$	0.94 $_4$

697485 Schott Type	nd 1.69700	ν d 48.5	nF−nC 0.01438
K-LaFn2	ne 1.70042	ν e 48.2	nF'−nC' 0.01454

屈折率 Refractive Indices		
nt	1014.0	1.68164
nA'	768.2	1.68790
nr	706.5	1.69029
nC	656.3	1.69270
nC'	643.9	1.69338
nD	589.3	1.69687
nd	587.6	1.69700
ne	546.1	1.70042
nF	486.1	1.70708
nF'	480.0	1.70792
ng	435.8	1.71514
nG'	434.1	
nh	404.7	1.72195
ni	365.0	1.73387

分散式の常数 Constans of Dispersion Formula	
A0	2.8209581
A1	−1.2387214 ×10 $^{-2}$
A2	1.9299170 ×10 $^{-2}$
A3	1.0436756 ×10 $^{-3}$
A4	−7.7921095 ×10 $^{-5}$
A5	5.1365409 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δ θ C,t	−0.0032
Δ θ C,A'	−0.0014
Δ θ g,d	−0.0039
Δ θ g,F	−0.0041
Δ θ i,g	−0.0120

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01106	0.00480	0.00430	0.00772
θ C,t	θ C,A'	θ d,C	θ e,C
0.769	0.334	0.299	0.537
ng−nd	ng−nF	nh−ng	ni−ng
0.01814	0.00806	0.00681	0.01873
θ g,d	θ g,F	θ h,g	θ i,g
1.261	0.561	0.474	1.303
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01174	0.00704	0.00750	0.02595
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.807	0.484	0.516	1.785

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 526 (5)	転移点 Tg (℃) Transformation Point 647
ビッカース硬さ Hv Vickers Hardness 530	屈伏点 At (℃) Yielding Point 686
磨耗度 Ha Abrasion 150	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 86
ヤング率 E (10^{8}N/m^2) Young's Modulus 682	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 265	
ポアソン比 σ Poisson Ratio 0.285	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 38/34
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.98
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.08 $_2$	
350	0.41 $_4$	0.11 $_0$
360	0.70 $_8$	0.42 $_3$
370	0.86 $_0$	0.68 $_6$
380	0.92 $_2$	0.81 $_7$
390	0.95 $_1$	0.88 $_3$
400	0.96 $_5$	0.91 $_6$
420	0.97 $_7$	0.94 $_4$
440	0.98 $_2$	0.95 $_7$
460	0.98 $_5$	0.96 $_4$
480	0.98 $_8$	0.97 $_1$
500	0.99 $_2$	0.98 $_2$
550	0.99 $_5$	0.98 $_9$
600	0.99 $_5$	0.98 $_9$
650	0.99 $_7$	0.99 $_2$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_5$	0.98 $_9$
2000	0.96 $_8$	0.92 $_3$

700480 Schott Type	nd 1.70000	ν d 48.0	nF−nC 0.01459
K-LaFn3	ne 1.70348	ν e 47.7	nF'−nC' 0.01474

屈折率 Refractive Indices		
nt	1014.0	1.68458
nA'	768.2	1.69080
nr	706.5	1.69321
nC	656.3	1.69564
nC'	643.9	1.69634
nD	589.3	1.69988
nd	587.6	1.70000
ne	546.1	1.70348
nF	486.1	1.71023
nF'	480.0	1.71108
ng	435.8	1.71839
nG'	434.1	
nh	404.7	1.72530
ni	365.0	1.73737

分散式の常数 Constans of Dispersion Formula	
A0	2.8276713
A1	−1.0513547 ×10 $^{-2}$
A2	2.0813388 ×10 $^{-2}$
A3	7.9058417 ×10 $^{-4}$
A4	−5.0424719 ×10 $^{-5}$
A5	4.0193189 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δ θ C,t	−0.0120
Δ θ C,A'	−0.0029
Δ θ g,d	−0.0059
Δ θ g,F	−0.0061
Δ θ i,g	−0.0174

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01106	0.00484	0.00436	0.00784
θ C,t	θ C,A'	θ d,C	θ e,C
0.758	0.332	0.299	0.537
ng−nd	ng−nF	nh−ng	ni−ng
0.01839	0.00816	0.00691	0.01898
θ g,d	θ g,F	θ h,g	θ i,g
1.260	0.559	0.474	1.301
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01176	0.00714	0.00760	0.02629
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.798	0.484	0.516	1.784

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	551 (6)	転移点 Tg (℃) Transformation Point	639
ビッカース硬さ Hv Vickers Hardness	549	屈伏点 At (℃) Yielding Point	684
磨耗度 Ha Abrasion	170	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃)	96
ヤング率 E (10^{8}N/m^2) Young's Modulus	881	備考 Remark s	
剛性率 G (10^{8}N/m^2) Modulus of Rigidity	346		
ポアソン比 σ Poisson Ratio	0.274	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	38/34
耐酸性(粉末法) RA Acid Resistance	4	比重 S.g Specific Gravity	4.02
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.11 $_4$	
350	0.44 $_7$	0.13 $_4$
360	0.72 $_7$	0.45 $_0$
370	0.86 $_2$	0.69 $_1$
380	0.92 $_9$	0.83 $_2$
390	0.95 $_7$	0.89 $_6$
400	0.97 $_1$	0.93 $_0$
420	0.98 $_1$	0.95 $_4$
440	0.98 $_4$	0.96 $_1$
460	0.98 $_5$	0.96 $_4$
480	0.98 $_8$	0.97 $_1$
500	0.99 $_1$	0.97 $_8$
550	0.99 $_2$	0.98 $_2$
600	0.99 $_5$	0.98 $_9$
650	0.99 $_5$	0.98 $_9$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_8$	0.99 $_6$
2000	0.98 $_1$	0.95 $_4$

720437 Schott Type	nd 1.72000	ν d 43.7	nF−nC 0.01648
LaFn4	ne 1.72391	ν e 43.4	nF'−nC' 0.01668

屈折率 Refractive Indices		
nt	1014.0	1.70282
nA'	768.2	1.70968
nr	706.5	1.71237
nC	656.3	1.71510
nC'	643.9	1.71587
nD	589.3	1.71985
nd	587.6	1.72000
ne	546.1	1.72391
nF	486.1	1.73158
nF'	480.0	1.73255
ng	435.8	1.74097
nG'	434.1	
nh	404.7	1.74900
ni	365.0	1.76326

分散式の常数 Constans of Dispersion Formula	
A0	2.8855729
A1	−1.0279711 ×10 $^{-2}$
A2	2.4792351 ×10 $^{-2}$
A3	4.9314273 ×10 $^{-4}$
A4	1.1391520 ×10 $^{-5}$
A5	1.9559762 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	−0.0049
$\Delta\theta$ C,A'	−0.0008
$\Delta\theta$ g,d	−0.0025
$\Delta\theta$ g,F	−0.0019
$\Delta\theta$ i,g	0.0010

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01228	0.00542	0.00490	0.00881
θ C,t	θ C,A'	θ d,C	θ e,C
0.745	0.329	0.297	0.535
ng−nd	ng−nF	nh−ng	ni−ng
0.02097	0.00939	0.00803	0.02229
θ g,d	θ g,F	θ h,g	θ i,g
1.272	0.570	0.487	1.353
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01305	0.00804	0.00864	0.03071
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.782	0.482	0.518	1.841

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 531 (5)	転移点 Tg (℃) Transformation Point 615
ビッカース硬さ Hv Vickers Hardness 521	屈伏点 At (℃) Yielding Point 666
磨耗度 Ha Abrasion 170	線膨張係数 $\alpha\times10^{-7}$ Thermal Expansion (100−300℃) 90
ヤング率 E (10^8N/m^2) Young's Modulus 924	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 364	
ポアソン比 σ Poisson Ratio 0.269	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 40/35
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 4.12
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350	0.06 $_6$	
360	0.37 $_1$	0.08 $_4$
370	0.65 $_0$	0.34 $_1$
380	0.81 $_0$	0.59 $_0$
390	0.89 $_1$	0.75 $_1$
400	0.93 $_3$	0.84 $_2$
420	0.96 $_0$	0.90 $_3$
440	0.97 $_1$	0.93 $_0$
460	0.97 $_7$	0.94 $_4$
480	0.98 $_2$	0.95 $_7$
500	0.98 $_5$	0.96 $_4$
550	0.99 $_0$	0.97 $_5$
600	0.99 $_1$	0.97 $_8$
650	0.99 $_5$	0.98 $_9$
700	0.99 $_7$	0.99 $_2$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_5$	0.98 $_9$
2000	0.97 $_4$	0.93 $_7$

743492 Schott Type	nd 1.74300	ν d 49.2	nF−nC 0.01510
LaFn5	ne 1.74660	ν e 49.0	nF'−nC' 0.01525

屈折率 Refractive Indices		
nt	1014.0	1.72668
nA'	768.2	1.73335
nr	706.5	1.73590
nC	656.3	1.73845
nC'	643.9	1.73917
nD	589.3	1.74287
nd	587.6	1.74300
ne	546.1	1.74660
nF	486.1	1.75355
nF'	480.0	1.75442
ng	435.8	1.76193
nG'	434.1	
nh	404.7	1.76896
ni	365.0	1.78110

分散式の常数 Constans of Dispersion Formula	
A0	2.9698108
A1	$-1.1756836 \times 10^{-2}$
A2	2.4173933×10^{-2}
A3	1.6142985×10^{-4}
A4	4.1208778×10^{-5}
A5	$-1.2231213 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0037
$\Delta\theta$ C,A'	0.0017
$\Delta\theta$ g,d	−0.0103
$\Delta\theta$ g,F	−0.0086
$\Delta\theta$ i,g	−0.0393

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01177	0.00510	0.00455	0.00815
θ C,t	θ C,A'	θ d,C	θ e,C
0.779	0.338	0.301	0.540
ng−nd	ng−nF	nh−ng	ni−ng
0.01893	0.00838	0.00703	0.01917
θ g,d	θ g,F	θ h,g	θ i,g
1.254	0.555	0.466	1.270
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01249	0.00743	0.00782	0.02668
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.819	0.487	0.513	1.750

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	601 (6)	転移点 Tg (℃) Transformation Point	644
ビッカース硬さ Hv Vickers Hardness	599	屈伏点 At (℃) Yielding Point	671
磨耗度 Ha Abrasion	110	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	67
ヤング率 E (10^8N/m^2) Young's Modulus	1030	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	399		
ポアソン比 σ Poisson Ratio	0.292	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	38/31
耐酸性(粉末法) RA Acid Resistance	4	比重 S.g Specific Gravity	4.11
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.04 2	
320	0.22 7	0.02 4
330	0.44 7	0.13 4
340	0.61 9	0.30 1
350	0.75 7	0.49 8
360	0.84 3	0.65 4
370	0.90 8	0.78 6
380	0.93 9	0.85 4
390	0.95 7	0.89 6
400	0.96 8	0.92 3
420	0.97 5	0.94 0
440	0.98 1	0.95 4
460	0.98 2	0.95 7
480	0.98 5	0.96 4
500	0.98 8	0.97 1
550	0.99 0	0.97 5
600	0.99 0	0.97 5
650	0.99 4	0.98 5
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.98 2	0.95 7

735495 Schott Type	nd 1.73500	νd 49.5	nF−nC 0.01485
LaFn7	ne 1.73854	νe 49.3	nF'−nC' 0.01499

屈折率 Refractive Indices		
nt	1014.0	1.71872
nA'	768.2	1.72546
nr	706.5	1.72799
nC	656.3	1.73052
nC'	643.9	1.73123
nD	589.3	1.73487
nd	587.6	1.73500
ne	546.1	1.73854
nF	486.1	1.74537
nF'	480.0	1.74622
ng	435.8	1.75359
nG'	434.1	
nh	404.7	1.76048
ni	365.0	1.77241

分散式の常数 Constans of Dispersion Formula	
A0	2.9456059
A1	−1.3715367 ×10 $^{-2}$
A2	2.2746730 ×10 $^{-2}$
A3	3.8174875 ×10 $^{-4}$
A4	9.5555244 ×10 $^{-6}$
A5	4.3726193 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0175
Δθ C,A'	0.0043
Δθ g,d	−0.0115
Δθ g,F	−0.0096
Δθ i,g	−0.0392

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01180	0.00506	0.00448	0.00802
θ C,t	θ C,A'	θ d,C	θ e,C
0.795	0.341	0.302	0.540
ng−nd	ng−nF	nh−ng	ni−ng
0.01859	0.00822	0.00689	0.01882
θ g,d	θ g,F	θ h,g	θ i,g
1.252	0.554	0.464	1.267
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01251	0.00731	0.00768	0.02619
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.835	0.488	0.512	1.747

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 620 (6)	転移点 Tg (℃) Transformation Point 658
ビッカース硬さ Hv Vickers Hardness 613	屈伏点 At (℃) Yielding Point 673
磨耗度 Ha Abrasion 70	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 77
ヤング率 E (10^{8}N/m^2) Young's Modulus 1135	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 446	
ポアソン比 σ Poisson Ratio 0.273	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 38/32
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.90
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.05 $_4$	
330	0.25 $_1$	0.03 $_1$
340	0.48 $_2$	0.16 $_1$
350	0.65 $_6$	0.34 $_9$
360	0.78 $_7$	0.55 $_0$
370	0.86 $_8$	0.70 $_2$
380	0.91 $_9$	0.81 $_0$
390	0.94 $_7$	0.87 $_4$
400	0.96 $_1$	0.90 $_6$
420	0.97 $_5$	0.94 $_0$
440	0.98 $_2$	0.95 $_7$
460	0.98 $_5$	0.96 $_4$
480	0.98 $_8$	0.97 $_1$
500	0.98 $_8$	0.97 $_1$
550	0.99 $_4$	0.98 $_5$
600	0.99 $_7$	0.99 $_2$
650	0.99 $_7$	0.99 $_2$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_0$	0.97 $_5$
1500	0.98 $_5$	0.96 $_4$
2000	0.95 $_3$	0.88 $_7$

756476 Schott Type	nd 1.75600	νd 47.6	nF−nC 0.01589
LaFn8	ne 1.75978	νe 47.3	nF'−nC' 0.01605

屈折率 Refractive Indices		
nt	1014.0	1.73890
nA'	768.2	1.74585
nr	706.5	1.74852
nC	656.3	1.75122
nC'	643.9	1.75198
nD	589.3	1.75586
nd	587.6	1.75600
ne	546.1	1.75978
nF	486.1	1.76711
nF'	480.0	1.76803
ng	435.8	1.77594
nG'	434.1	
nh	404.7	1.78337
ni	365.0	1.79625

分散式の常数 Constans of Dispersion Formula	
A0	3.0092316
A1	$-1.1074297 \times 10^{-2}$
A2	2.6677749×10^{-2}
A3	$-8.9651881 \times 10^{-5}$
A4	7.2619355×10^{-5}
A5	$-2.2455275 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0072
Δθ C,A'	0.0038
Δθ g,d	−0.0123
Δθ g,F	−0.0102
Δθ i,g	−0.0433

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01232	0.00537	0.00478	0.00856
θ C,t	θ C,A'	θ d,C	θ e,C
0.775	0.338	0.301	0.539
ng−nd	ng−nF	nh−ng	ni−ng
0.01994	0.00883	0.00743	0.02031
θ g,d	θ g,F	θ h,g	θ i,g
1.255	0.556	0.468	1.278
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01308	0.00780	0.00825	0.02822
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.815	0.486	0.514	1.758

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 590 (6)	転移点 Tg (℃) Transformation Point 663
ビッカース硬さ Hv Vickers Hardness 620	屈伏点 At (℃) Yielding Point 688
磨耗度 Ha Abrasion 80	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 84
ヤング率 E (10^8N/m^2) Young's Modulus 1118	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 437	
ポアソン比 σ Poisson Ratio 0.279	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 39/32
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 4.07
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.02 9	
330	0.19 2	0.01 6
340	0.42 5	0.11 8
350	0.62 5	0.30 9
360	0.76 3	0.50 9
370	0.86 0	0.68 6
380	0.91 9	0.81 0
390	0.95 0	0.88 0
400	0.96 5	0.91 6
420	0.98 2	0.95 7
440	0.98 8	0.97 1
460	0.99 0	0.97 5
480	0.99 5	0.98 9
500	0.99 5	0.98 9
550	0.99 7	0.99 2
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.97 1	0.93 0
1500	0.96 8	0.92 3
2000	0.94 6	0.87 0

764403 Schott Type	nd 1.76400	ν d 40.3	nF−nC 0.01895
K-LaFn9	ne 1.76850	ν e 40.0	nF'−nC' 0.01920

屈折率 Refractive Indices

nt	1014.0	1.74459
nA'	768.2	1.75227
nr	706.5	1.75530
nC	656.3	1.75840
nC'	643.9	1.75928
nD	589.3	1.76383
nd	587.6	1.76400
ne	546.1	1.76850
nF	486.1	1.77735
nF'	480.0	1.77848
ng	435.8	1.78826
nG'	434.1	
nh	404.7	1.79762
ni	365.0	

分散式の常数 Constans of Dispersion Formula

A0	3.0328710
A1	$-1.3869280 \times 10^{-2}$
A2	2.3554889×10^{-2}
A3	2.4226145×10^{-3}
A4	$-2.5576787 \times 10^{-4}$
A5	1.7912149×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	−0.0055
$\Delta\theta$ C,A'	−0.0023
$\Delta\theta$ g,d	−0.0014
$\Delta\theta$ g,F	−0.0010
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01381	0.00613	0.00560	0.01010
θ C,t	θ C,A'	θ d,C	θ e,C
0.729	0.323	0.296	0.533
ng−nd	ng−nF	nh−ng	ni−ng
0.02426	0.01091	0.00936	
θ g,d	θ g,F	θ h,g	θ i,g
1.280	0.576	0.494	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01469	0.00922	0.00998	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.765	0.480	0.520	

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	539 (5)
ビッカース硬さ Hv Vickers Hardness	546
磨耗度 Ha Abrasion	140
ヤング率 E (10^8N/m^2) Young's Modulus	952
剛性率 G (10^8N/m^2) Modulus of Rigidity	374
ポアソン比 σ Poisson Ratio	0.274

化学的性質 Chemical Properties

耐水性(粉末法) RW Water Resistance	1
耐酸性(粉末法) RA Acid Resistance	4
耐候性(表面法) DW Weather Resistance	1

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	671
屈伏点 At (℃) Yielding Point	724
線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	88
備考 Remark s	

その他 Other Properties

泡 B Bubbles	
着色度 C Color Degree	41/35
比重 S.g Specific Gravity	4.26
脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350	0.05 4	
360	0.34 0	0.06 7
370	0.62 5	0.30 9
380	0.77 5	0.52 9
390	0.86 0	0.68 6
400	0.90 4	0.77 7
420	0.94 6	0.87 0
440	0.96 0	0.90 3
460	0.96 8	0.92 3
480	0.97 7	0.94 4
500	0.98 2	0.95 7
550	0.99 0	0.97 5
600	0.99 5	0.98 9
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.98 2	0.95 7

720421 Schott Type	nd 1.72016	νd 42.1	nF−nC 0.01712
LaFn10	ne 1.72422	νe 41.8	nF'−nC' 0.01734

屈折率 Refractive Indices

nt	1014.0	1.70242
nA'	768.2	1.70949
nr	706.5	1.71227
nC	656.3	1.71508
nC'	643.9	1.71588
nD	589.3	1.72000
nd	587.6	1.72016
ne	546.1	1.72422
nF	486.1	1.73220
nF'	480.0	1.73322
ng	435.8	1.74203
nG'	434.1	
nh	404.7	1.75047
ni	365.0	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01266	0.00559	0.00508	0.00914
θC,t	θC,A'	θd,C	θe,C
0.739	0.327	0.297	0.534
ng−nd	ng−nF	nh−ng	ni−ng
0.02187	0.00983	0.00844	
θg,d	θg,F	θh,g	θi,g
1.277	0.574	0.493	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01346	0.00834	0.00900	
θ'C',t	θ'e,C'	θ'F',e	θ'i,F'
0.776	0.481	0.519	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360	0.17 9	
370	0.50 5	0.18 1
380	0.74 0	0.47 1
390	0.86 0	0.68 6
400	0.91 8	0.80 7
420	0.96 0	0.90 3
440	0.97 1	0.93 0
460	0.97 5	0.94 0
480	0.98 2	0.95 7
500	0.98 5	0.96 4
550	0.99 0	0.97 5
600	0.99 4	0.98 5
650	0.99 4	0.98 5
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 5	0.94 0

分散式の常数 Constans of Dispersion Formula

A0	2.8843797
A1	−1.0848387 ×10 −2
A2	2.5087198 ×10 −2
A3	6.3568584 ×10 −4
A4	4.9636279 ×10 −6
A5	2.5140320 ×10 −6

異常分散性 Deviation of Relative Partial Dispersions

Δθ C,t	−0.0029
Δθ C,A'	−0.0013
Δθ g,d	−0.0007
Δθ g,F	
Δθ i,g	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 490 (5)	転移点 Tg (℃) Transformation Point 655
ビッカース硬さ Hv Vickers Hardness 523	屈伏点 At (℃) Yielding Point 693
磨耗度 Ha Abrasion 160	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 85
ヤング率 E (10^{8}N/m^2) Young's Modulus 899	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 357	
ポアソン比 σ Poisson Ratio 0.261	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 40/36
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 4.08
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

720460 Schott Type	nd 1.72013	ν d 46.0	nF−nC 0.01566
K-LaFn11	ne 1.72385	ν e 45.7	nF'−nC' 0.01584

屈折率 Refractive Indices		
nt	1014.0	1.70354
nA'	768.2	1.71029
nr	706.5	1.71286
nC	656.3	1.71546
nC'	643.9	1.71620
nD	589.3	1.71999
nd	587.6	1.72013
ne	546.1	1.72385
nF	486.1	1.73112
nF'	480.0	1.73204
ng	435.8	1.73994
nG'	434.1	
nh	404.7	1.74742
ni	365.0	1.76066

分散式の常数 Constans of Dispersion Formula	
A0	2.8971956
A1	$-1.4675814 \times 10^{-2}$
A2	1.8807805×10^{-2}
A3	1.9207795×10^{-3}
A4	$-1.9387667 \times 10^{-4}$
A5	1.1751264×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0005
$\Delta\theta$ C,A'	−0.0022
$\Delta\theta$ g,d	−0.0053
$\Delta\theta$ g,F	−0.0051
$\Delta\theta$ i,g	−0.0107

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01192	0.00517	0.00467	0.00839
θ C,t	θ C,A'	θ d,C	θ e,C
0.761	0.330	0.298	0.536
ng−nd	ng−nF	nh−ng	ni−ng
0.01981	0.00882	0.00748	0.02072
θ g,d	θ g,F	θ h,g	θ i,g
1.265	0.563	0.478	1.323
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01266	0.00765	0.00819	0.02862
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.799	0.483	0.517	1.807

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	558 (6)	転移点 Tg (℃) Transformation Point	648
ビッカース硬さ Hv Vickers Hardness	592	屈伏点 At (℃) Yielding Point	692
磨耗度 Ha Abrasion	120	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	82
ヤング率 E (10^8N/m^2) Young's Modulus	984	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	383		
ポアソン比 σ Poisson Ratio	0.285	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	38/34
耐酸性(粉末法) RA Acid Resistance	4	比重 S.g Specific Gravity	3.88
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.02 2	
350	0.27 9	0.04 1
360	0.63 1	0.31 7
370	0.82 6	0.62 0
380	0.90 9	0.78 9
390	0.94 3	0.86 4
400	0.96 1	0.90 6
420	0.97 4	0.93 7
440	0.98 1	0.95 4
460	0.98 5	0.96 4
480	0.98 8	0.97 1
500	0.99 0	0.97 5
550	0.99 5	0.98 9
600	0.99 5	0.98 9
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 7	0.99 2
2000	0.97 8	0.94 7

757317 Schott Type	nd 1.75690	ν d 31.7	nF−nC 0.02390
LaFn12	ne 1.76255	ν e 31.4	nF'−nC' 0.02427

屈折率 Refractive Indices		
nt	1014.0	1.73330
nA'	768.2	1.74245
nr	706.5	1.74615
nC	656.3	1.74995
nC'	643.9	1.75103
nD	589.3	1.75669
nd	587.6	1.75690
ne	546.1	1.76255
nF	486.1	1.77385
nF'	480.0	1.77530
ng	435.8	1.78816
nG'	434.1	
nh	404.7	1.80087
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	2.9838547
A1	$-1.2191745 \times 10^{-2}$
A2	3.2283756×10^{-2}
A3	1.7911052×10^{-3}
A4	$-1.0680885 \times 10^{-4}$
A5	1.5562547×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0027
$\Delta\theta$ C,A'	−0.0020
$\Delta\theta$ g,d	0.0091
$\Delta\theta$ g,F	0.0092
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01665	0.00750	0.00695	0.01260
θ C,t	θ C,A'	θ d,C	θ e,C
0.697	0.314	0.291	0.527
ng−nd	ng−nF	nh−ng	ni−ng
0.03126	0.01431	0.01271	
θ g,d	θ g,F	θ h,g	θ i,g
1.308	0.599	0.532	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01773	0.01152	0.01275	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.731	0.475	0.525	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 460 (5)	転移点 Tg (℃) Transformation Point 540
ビッカース硬さ Hv Vickers Hardness 473	屈伏点 At (℃) Yielding Point 580
磨耗度 Ha Abrasion 200	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 86
ヤング率 E (10^8N/m^2) Young's Modulus 843	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 332	
ポアソン比 σ Poisson Ratio 0.267	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 44/38
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 4.19
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370		
380	0.04 2	
390	0.27 0	0.03 7
400	0.56 4	0.23 9
420	0.84 1	0.64 9
440	0.92 5	0.82 3
460	0.95 7	0.89 6
480	0.97 1	0.93 0
500	0.98 1	0.95 4
550	0.99 0	0.97 5
600	0.99 1	0.97 8
650	0.99 4	0.98 5
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.98 2	0.95 7

806409 Schott Type K-LaSFn1	nd 1.80600	νd 40.9	nF−nC 0.01973
	ne 1.81069	νe 40.6	nF'−nC' 0.01996

屈折率 Refractive Indices		
nt	1014.0	1.78553
nA'	768.2	1.79367
nr	706.5	1.79688
nC	656.3	1.80014
nC'	643.9	1.80107
nD	589.3	1.80583
nd	587.6	1.80600
ne	546.1	1.81069
nF	486.1	1.81987
nF'	480.0	1.82103
ng	435.8	1.83108
nG'	434.1	
nh	404.7	1.84066
ni	365.0	1.85762

分散式の常数 Constans of Dispersion Formula	
A0	3.1702027
A1	−1.2382522 ×10 $^{-2}$
A2	3.0733236 ×10 $^{-2}$
A3	8.0765267 ×10 $^{-4}$
A4	−1.4297157 ×10 $^{-5}$
A5	3.8064917 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0035
Δθ C,A'	0.0014
Δθ g,d	−0.0093
Δθ g,F	−0.0077
Δθ i,g	−0.0280

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01461	0.00647	0.00586	0.01055
θ C,t	θ C,A'	θ d,C	θ e,C
0.740	0.328	0.297	0.535
ng−nd	ng−nF	nh−ng	ni−ng
0.02508	0.01121	0.00958	0.02654
θ g,d	θ g,F	θ h,g	θ i,g
1.271	0.568	0.486	1.345
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01554	0.00962	0.01034	0.03659
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.779	0.482	0.518	1.833

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 599 (6)	転移点 Tg (℃) Transformation Point 675
ビッカース硬さ Hv Vickers Hardness 624	屈伏点 At (℃) Yielding Point 709
磨耗度 Ha Abrasion 63	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 80
ヤング率 E (10^{8}N/m^2) Young's Modulus 1125	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 438	
ポアソン比 σ Poisson Ratio 0.284	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 40/33
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 4.17
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.00 $_2$	
320	0.01 $_7$	
330	0.16 $_5$	0.01 $_1$
340	0.41 $_3$	0.11 $_0$
350	0.61 $_6$	0.29 $_8$
360	0.75 $_4$	0.49 $_4$
370	0.84 $_3$	0.65 $_3$
380	0.89 $_8$	0.76 $_5$
390	0.93 $_2$	0.83 $_9$
400	0.95 $_2$	0.88 $_5$
420	0.97 $_2$	0.93 $_1$
440	0.97 $_9$	0.95 $_0$
460	0.98 $_5$	0.96 $_5$
480	0.99 $_1$	0.97 $_9$
500	0.99 $_4$	0.98 $_7$
550	0.99 $_8$	0.99 $_6$
600	0.99 $_8$	0.99 $_6$
650	0.99 $_8$	0.99 $_6$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_8$	0.99 $_6$
2000	0.98 $_5$	0.96 $_4$

805396 Schott Type K-LaSFn2	nd 1.80500	ν d 39.6	nF-nC 0.02034
	ne 1.80983	ν e 39.3	nF'-nC' 0.02059

屈折率 Refractive Indices		
nt	1014.0	1.78379
nA'	768.2	1.79232
nr	706.5	1.79562
nC	656.3	1.79897
nC'	643.9	1.79992
nD	589.3	1.80482
nd	587.6	1.80500
ne	546.1	1.80983
nF	486.1	1.81931
nF'	480.0	1.82051
ng	435.8	1.83093
nG'	434.1	
nh	404.7	1.84087
ni	365.0	1.85865

分散式の常数 Constans of Dispersion Formula	
A0	3.1713681
A1	$-1.7177473 \times 10^{-2}$
A2	2.7136710×10^{-2}
A3	2.0669191×10^{-3}
A4	$-1.7405774 \times 10^{-4}$
A5	1.2284394×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0154
$\Delta\theta$ C,A'	0.0020
$\Delta\theta$ g,d	−0.0082
$\Delta\theta$ g,F	−0.0065
$\Delta\theta$ i,g	−0.0204

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.01518	0.00665	0.00603	0.01086
θ C,t	θ C,A'	θ d,C	θ e,C
0.746	0.327	0.296	0.534
ng-nd	ng-nF	nh-ng	ni-ng
0.02593	0.01162	0.00994	0.02772
θ g,d	θ g,F	θ h,g	θ i,g
1.275	0.571	0.489	1.363
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.01613	0.00991	0.01068	0.03814
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.783	0.481	0.519	1.852

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 613 (6)	転移点 Tg (℃) Transformation Point 622
ビッカース硬さ Hv Vickers Hardness 637	屈伏点 At (℃) Yielding Point 654
磨耗度 Ha Abrasion 74	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 70
ヤング率 E (10^8N/m^2) Young's Modulus 1149	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 447	
ポアソン比 σ Poisson Ratio 0.286	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 41/34
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 4.13
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.00 1	
330	0.04 4	
340	0.26 1	0.03 5
350	0.51 7	0.19 3
360	0.70 0	0.41 0
370	0.81 1	0.59 3
380	0.88 2	0.73 1
390	0.92 4	0.82 1
400	0.94 9	0.87 8
420	0.97 0	0.92 7
440	0.98 2	0.95 6
460	0.98 8	0.97 1
480	0.99 3	0.98 2
500	0.99 7	0.99 4
550	0.99 8	0.99 8
600	0.99 8	0.99 8
650	0.99 8	0.99 8
700	0.99 8	0.99 8
800	0.99 8	0.99 8
1060	0.99 8	0.99 8
1500	0.99 8	0.99 8
2000	0.97 6	0.94 0

800423 Schott Type	nd	1.79950	ν d	42.3	nF−nC 0.01890
LaSFn3	ne	1.80399	ν e	42.0	nF'−nC' 0.01913

屈折率 Refractive Indices

nt	1014.0	1.77978
nA'	768.2	1.78764
nr	706.5	1.79073
nC	656.3	1.79388
nC'	643.9	1.79476
nD	589.3	1.79933
nd	587.6	1.79950
ne	546.1	1.80399
nF	486.1	1.81278
nF'	480.0	1.81389
ng	435.8	1.82350
nG'	434.1	
nh	404.7	1.83262
ni	365.0	1.84870

分散式の常数 Constans of Dispersion Formula

A0	3.1500372
A1	$-1.1882293 \times 10^{-2}$
A2	3.0091056×10^{-2}
A3	5.3837878×10^{-4}
A4	1.9843423×10^{-5}
A5	1.4717086×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0025
$\Delta\theta$ C,A'	0.0021
$\Delta\theta$ g,d	−0.0078
$\Delta\theta$ g,F	−0.0066
$\Delta\theta$ i,g	−0.0290

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01410	0.00624	0.00562	0.01011
θ C,t	θ C,A'	θ d,C	θ e,C
0.746	0.330	0.297	0.535
ng−nd	ng−nF	nh−ng	ni−ng
0.02400	0.01072	0.00912	0.02520
θ g,d	θ g,F	θ h,g	θ i,g
1.270	0.567	0.483	1.333
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01498	0.00923	0.00990	0.03481
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.783	0.482	0.518	1.820

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	571 (6)
ビッカース硬さ Hv Vickers Hardness	566
磨耗度 Ha Abrasion	90
ヤング率 E (10^8N/m^2) Young's Modulus	1121
剛性率 G (10^8N/m^2) Modulus of Rigidity	432
ポアソン比 σ Poisson Ratio	0.296

化学的性質 Chemical Properties

耐水性(粉末法) RW Water Resistance	1
耐酸性(粉末法) RA Acid Resistance	3
耐候性(表面法) DW Weather Resistance	1

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	666
屈伏点 At (℃) Yielding Point	699
線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃)	86
備考 Remark s	

その他 Other Properties

泡 B Bubbles	
着色度 C Color Degree	41/34
比重 S.g Specific Gravity	4.35
脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.11 4	
350	0.37 1	0.08 4
360	0.60 0	0.27 9
370	0.76 6	0.51 4
380	0.85 3	0.67 2
390	0.90 5	0.78 0
400	0.93 3	0.84 2
420	0.95 7	0.89 6
440	0.96 8	0.92 3
460	0.97 5	0.94 0
480	0.98 2	0.95 7
500	0.98 5	0.96 4
550	0.98 8	0.97 1
600	0.99 0	0.97 5
650	0.99 4	0.98 5
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 5	0.98 9
2000	0.97 4	0.93 7

785437 Schott Type LaSFn4	nd 1.78500	νd 43.7	nF−nC 0.01798
	ne 1.78927	νe 43.4	nF'−nC' 0.01817

屈折率 Refractive Indices		
nt	1014.0	1.76608
nA'	768.2	1.77366
nr	706.5	1.77663
nC	656.3	1.77962
nC'	643.9	1.78049
nD	589.3	1.78484
nd	587.6	1.78500
ne	546.1	1.78927
nF	486.1	1.79760
nF'	480.0	1.79866
ng	435.8	1.80773
nG'	434.1	
nh	404.7	1.81633
ni	365.0	1.83143

分散式の常数 Constans of Dispersion Formula	
A0	3.1022224
A1	$-1.1531366 \times 10^{-2}$
A2	2.9134127×10^{-2}
A3	3.1968708×10^{-4}
A4	3.5865480×10^{-5}
A5	5.0762944×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0032
Δθ C,A'	0.0018
Δθ g,d	−0.0108
Δθ g,F	−0.0084
Δθ i,g	−0.0337

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01354	0.00596	0.00538	0.00965
θ C,t	θ C,A'	θ d,C	θ e,C
0.753	0.331	0.299	0.537
ng−nd	ng−nF	nh−ng	ni−ng
0.02273	0.01013	0.00860	0.02370
θ g,d	θ g,F	θ h,g	θ i,g
1.264	0.563	0.478	1.318
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01441	0.00878	0.00939	0.03277
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.793	0.483	0.517	1.804

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 743 (7)	転移点 Tg (℃) Transformation Point 645
ビッカース硬さ Hv Vickers Hardness 760	屈伏点 At (℃) Yielding Point 689
磨耗度 Ha Abrasion 90	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 87
ヤング率 E (10^8N/m^2) Young's Modulus 1115	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 430	
ポアソン比 σ Poisson Ratio 0.296	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 40/33
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 4.21
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.01 1	
340	0.17 0	0.01 2
350	0.44 7	0.13 4
360	0.66 6	0.36 3
370	0.79 6	0.56 6
380	0.88 0	0.72 8
390	0.92 2	0.81 7
400	0.94 6	0.87 0
420	0.96 7	0.92 0
440	0.97 4	0.93 7
460	0.97 8	0.94 7
480	0.98 2	0.95 7
500	0.98 5	0.96 4
550	0.98 8	0.97 1
600	0.99 0	0.97 5
650	0.99 2	0.98 2
700	0.99 5	0.98 9
800	0.99 7	0.99 2
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 5	0.94 0

802467 Schott Type K-LaSFn6	nd 1.80235	νd 46.7	nF-nC 0.01718
	ne 1.80644	νe 46.5	nF'-nC' 0.01735

屈折率 Refractive Indices		
nt	1014.0	1.78379
nA'	768.2	1.79139
nr	706.5	1.79428
nC	656.3	1.79719
nC'	643.9	1.79801
nD	589.3	1.80220
nd	587.6	1.80235
ne	546.1	1.80644
nF	486.1	1.81437
nF'	480.0	1.81536
ng	435.8	1.82393
nG'	434.1	
nh	404.7	1.83199
ni	365.0	1.84599

分散式の常数 Constans of Dispersion Formula	
A0	3.1695544
A1	$-1.4517051 \times 10^{-2}$
A2	2.7644048×10^{-2}
A3	3.9048818×10^{-4}
A4	2.3230829×10^{-5}
A5	2.3865962×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0159
Δθ C,A'	0.0044
Δθ g,d	−0.0128
Δθ g,F	−0.0108
Δθ i,g	−0.0442

部分分散及び部分分散比
Partial Dispersions and Relative Partial Dispersions

nC-nt	nC-nA'	nd-nC	ne-nC
0.01340	0.00580	0.00516	0.00925
θ C,t	θ C,A'	θ d,C	θ e,C
0.780	0.338	0.300	0.538
ng-nd	ng-nF	nh-ng	ni-ng
0.02158	0.00956	0.00806	0.02206
θ g,d	θ g,F	θ h,g	θ i,g
1.256	0.556	0.469	1.284
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.01422	0.00843	0.00892	0.03063
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.820	0.486	0.514	1.765

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 587 (6)	転移点 Tg (℃) Transformation Point 686
ビッカース硬さ Hv Vickers Hardness 579	屈伏点 At (℃) Yielding Point 710
磨耗度 Ha Abrasion 60	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 74
ヤング率 E (10^8N/m^2) Young's Modulus 1231	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 475	
ポアソン比 σ Poisson Ratio 0.295	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 39/32
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 4.72
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.00 5	
320	0.10 8	0.00 3
330	0.34 8	0.07 1
340	0.57 0	0.24 5
350	0.72 5	0.44 8
360	0.82 0	0.60 9
370	0.87 4	0.71 5
380	0.91 3	0.79 7
390	0.93 3	0.84 1
400	0.94 7	0.87 3
420	0.96 0	0.90 3
440	0.96 6	0.91 8
460	0.97 0	0.92 8
480	0.97 3	0.93 5
500	0.98 5	0.95 8
550	0.99 3	0.98 0
600	0.99 5	0.98 7
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 1	0.93 0

773496 Schott Type K-LaSFn7	nd 1.77250	ν d 49.6	nF−nC 0.01558
	ne 1.77621	ν e 49.4	nF'−nC' 0.01573

屈折率 Refractive Indices		
nt	1014.0	1.75544
nA'	768.2	1.76247
nr	706.5	1.76514
nC	656.3	1.76779
nC'	643.9	1.76854
nD	589.3	1.77236
nd	587.6	1.77250
ne	546.1	1.77621
nF	486.1	1.78337
nF'	480.0	1.78427
ng	435.8	1.79196
nG'	434.1	
nh	404.7	1.79920
ni	365.0	1.81159

分散式の常数 Constans of Dispersion Formula	
A0	3.0684332
A1	$-1.2575311 \times 10^{-2}$
A2	2.7080646×10^{-2}
A3	$-4.0200298 \times 10^{-4}$
A4	1.2281886×10^{-4}
A5	$-5.4934589 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0152
$\Delta\theta$ C,A'	0.0049
$\Delta\theta$ g,d	−0.0141
$\Delta\theta$ g,F	−0.0116
$\Delta\theta$ i,g	−0.0459

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01235	0.00532	0.00471	0.00842
θ C,t	θ C,A'	θ d,C	θ e,C
0.793	0.341	0.302	0.540
ng−nd	ng−nF	nh−ng	ni−ng
0.01946	0.00859	0.00724	0.01963
θ g,d	θ g,F	θ h,g	θ i,g
1.249	0.551	0.465	1.260
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01310	0.00767	0.00806	0.02732
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.833	0.488	0.512	1.737

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 705 (7)	転移点 Tg (℃) Transformation Point 673
ビッカース硬さ Hv Vickers Hardness 752	屈伏点 At (℃) Yielding Point 697
磨耗度 Ha Abrasion 60	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 72
ヤング率 E (10^8N/m^2) Young's Modulus 1205	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 465	
ポアソン比 σ Poisson Ratio 0.297	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 38/31
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 4.44
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300	0.01 9	
310	0.10 7	0.00 3
320	0.35 9	0.07 7
330	0.55 3	0.22 7
340	0.70 7	0.42 1
350	0.81 6	0.60 1
360	0.88 6	0.73 9
370	0.93 2	0.83 8
380	0.95 5	0.89 2
390	0.97 4	0.93 6
400	0.98 0	0.95 1
420	0.98 7	0.97 0
440	0.99 1	0.97 9
460	0.99 3	0.98 3
480	0.99 6	0.99 1
500	0.99 6	0.99 0
550	0.99 7	0.99 3
600	0.99 8	0.99 5
650	0.99 8	0.99 5
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 7	0.99 4
2000	0.96 8	0.92 3

835427 Schott Type K-LaSFn8	nd 1.83500	νd 42.7	nF-nC 0.01954
	ne 1.83964	νe 42.5	nF'-nC' 0.01976

屈折率 Refractive Indices		
nt	1014.0	1.81434
nA'	768.2	1.82269
nr	706.5	1.82591
nC	656.3	1.82917
nC'	643.9	1.83009
nD	589.3	1.83483
nd	587.6	1.83500
ne	546.1	1.83964
nF	486.1	1.84871
nF'	480.0	1.84985
ng	435.8	1.85972
nG'	434.1	
nh	404.7	1.86905
ni	365.0	1.88540

分散式の常数 Constans of Dispersion Formula	
A0	3.2782547
A1	$-1.5874744 \times 10^{-2}$
A2	2.9711102×10^{-2}
A3	1.0965326×10^{-3}
A4	$-4.5736257 \times 10^{-5}$
A5	4.1481846×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0134
Δθ C,A'	0.0030
Δθ g,d	−0.0117
Δθ g,F	−0.0097
Δθ i,g	−0.0448

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.01483	0.00648	0.00583	0.01047
θ C,t	θ C,A'	θ d,C	θ e,C
0.759	0.332	0.298	0.536
ng-nd	ng-nF	nh-ng	ni-ng
0.02472	0.01101	0.00933	0.02568
θ g,d	θ g,F	θ h,g	θ i,g
1.265	0.563	0.477	1.314
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.01575	0.00955	0.01021	0.03555
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.797	0.483	0.517	1.799

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 602 (6)	転移点 Tg (℃) Transformation Point 687
ビッカース硬さ Hv Vickers Hardness 620	屈伏点 At (℃) Yielding Point 709
磨耗度 Ha Abrasion 65	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 74
ヤング率 E (10^8N/m^2) Young's Modulus 1240	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 481	
ポアソン比 σ Poisson Ratio 0.290	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 41/33
耐酸性(粉末法) RA Acid Resistance 2	比重 S.g Specific Gravity 4.90
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.00 3	
320	0.04 3	
330	0.21 1	0.02 0
340	0.43 2	0.12 3
350	0.61 9	0.30 1
360	0.75 8	0.50 0
370	0.84 7	0.65 9
380	0.90 3	0.77 5
390	0.93 8	0.85 1
400	0.95 5	0.89 2
420	0.97 6	0.94 0
440	0.98 3	0.95 9
460	0.99 0	0.97 5
480	0.99 1	0.97 8
500	0.99 4	0.98 6
550	0.99 8	0.99 5
600	0.99 7	0.99 3
650	0.99 6	0.99 0
700	0.99 8	0.99 5
800	0.99 5	0.98 7
1060	0.99 8	0.99 6
1500	0.99 8	0.99 5
2000	0.97 3	0.93 3

816467 Schott Type K-LaSFn9	nd 1.81600	νd 46.7	nF-nC 0.01748
	ne 1.82018	νe 46.4	nF'-nC' 0.01767

屈折率 Refractive Indices		
nt	1014.0	1.79726
nA'	768.2	1.80488
nr	706.5	1.80781
nC	656.3	1.81076
nC'	643.9	1.81158
nD	589.3	1.81585
nd	587.6	1.81600
ne	546.1	1.82018
nF	486.1	1.82824
nF'	480.0	1.82925
ng	435.8	1.83797
nG'	434.1	
nh	404.7	1.84615
ni	365.0	1.86032

分散式の常数 Constans of Dispersion Formula	
A0	3.2166408
A1	−1.3939421 ×10 $^{-2}$
A2	2.8089260 ×10 $^{-2}$
A3	5.4031151 ×10 $^{-4}$
A4	3.2097031 ×10 $^{-6}$
A5	1.0680734 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0083
Δθ C,A'	0.0032
Δθ g,d	−0.0121
Δθ g,F	−0.0106
Δθ i,g	−0.0498

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01350	0.00588	0.00524	0.00942
θ C,t	θ C,A'	θ d,C	θ e,C
0.772	0.336	0.300	0.539
ng−nd	ng−nF	nh−ng	ni−ng
0.02197	0.00973	0.00818	0.02235
θ g,d	θ g,F	θ h,g	θ i,g
1.257	0.557	0.468	1.279
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01432	0.00860	0.00907	0.03107
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.810	0.487	0.513	1.758

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 769 (7)	転移点 Tg (℃) Transformation Point 693
ビッカース硬さ Hv Vickers Hardness 786	屈伏点 At (℃) Yielding Point 719
磨耗度 Ha Abrasion 50	線膨張係数 α ×10^{-7} Thermal Expansion (100-300℃) 76
ヤング率 E (10^{8}N/m^2) Young's Modulus 1238	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 477	
ポアソン比 σ Poisson Ratio 0.298	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 40/32
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 4.96
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.01 3	
320	0.11 1	
330	0.24 1	0.02 8
340	0.40 5	0.10 4
350	0.57 6	0.25 2
360	0.71 4	0.43 0
370	0.81 9	0.60 8
380	0.88 3	0.73 3
390	0.92 3	0.82 0
400	0.94 7	0.87 4
420	0.96 8	0.92 3
440	0.97 7	0.94 4
460	0.98 1	0.95 4
480	0.98 2	0.95 7
500	0.98 5	0.96 4
550	0.98 8	0.97 1
600	0.99 1	0.97 8
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 0	0.97 1
1500	0.99 0	0.97 1
2000	0.96 1	0.90 6

816444 Schott Type K-LaSFn10	nd 1.81550	νd 44.4	nF-nC 0.01836
	ne 1.81987	νe 44.2	nF'-nC' 0.01856

屈折率 Refractive Indices		
nt	1014.0	1.79586
nA'	768.2	1.80383
nr	706.5	1.80690
nC	656.3	1.80999
nC'	643.9	1.81086
nD	589.3	1.81534
nd	587.6	1.81550
ne	546.1	1.81987
nF	486.1	1.82835
nF'	480.0	1.82942
ng	435.8	1.83863
nG'	434.1	
nh	404.7	1.84731
ni	365.0	1.86242

分散式の常数 Constans of Dispersion Formula	
A0	3.2087033
A1	$-1.3472892 \times 10^{-2}$
A2	3.0986696×10^{-2}
A3	5.6893297×10^{-5}
A4	7.8668743×10^{-5}
A5	$-2.3120976 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0162
Δθ C,A'	0.0050
Δθ g,d	−0.0137
Δθ g,F	−0.0107
Δθ i,g	−0.0502

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01413	0.00616	0.00551	0.00988
θ C,t	θ C,A'	θ d,C	θ e,C
0.770	0.336	0.300	0.538
ng−nd	ng−nF	nh−ng	ni−ng
0.02313	0.01028	0.00868	0.02379
θ g,d	θ g,F	θ h,g	θ i,g
1.260	0.560	0.473	1.296
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01500	0.00901	0.00955	0.03300
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.808	0.485	0.515	1.778

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 735 (7)	転移点 Tg (℃) Transformation Point 683
ビッカース硬さ Hv Vickers Hardness 739	屈伏点 At (℃) Yielding Point 710
磨耗度 Ha Abrasion 60	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 72
ヤング率 E (10^8N/m^2) Young's Modulus 1236	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 477	
ポアソン比 σ Poisson Ratio 0.294	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 41/34
耐酸性(粉末法) RA Acid Resistance 2	比重 S.g Specific Gravity 4.80
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.07 9	
350	0.37 1	0.08 4
360	0.63 4	0.32 0
370	0.79 9	0.57 1
380	0.87 6	0.71 9
390	0.92 2	0.81 7
400	0.94 0	0.85 7
420	0.96 4	0.91 3
440	0.97 1	0.93 0
460	0.97 5	0.94 0
480	0.98 1	0.95 4
500	0.98 5	0.96 4
550	0.98 8	0.97 1
600	0.99 1	0.97 8
650	0.99 5	0.98 9
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.97 1	0.93 0
1500	0.97 1	0.93 0
2000	0.92 9	0.83 2

834372 Schott Type K-LaSFn14	nd 1.83400	νd 37.2	nF-nC 0.02242
	ne 1.83932	νe 36.9	nF'-nC' 0.02272

屈折率 Refractive Indices		
nt	1014.0	1.81096
nA'	768.2	1.82014
nr	706.5	1.82373
nC	656.3	1.82739
nC'	643.9	1.82842
nD	589.3	1.83380
nd	587.6	1.83400
ne	546.1	1.83932
nF	486.1	1.84981
nF'	480.0	1.85114
ng	435.8	1.86274
nG'	434.1	
nh	404.7	1.87392
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	3.2694192
A1	$-1.8977860 \times 10^{-2}$
A2	2.7659868×10^{-2}
A3	3.2307305×10^{-3}
A4	$-3.3742447 \times 10^{-4}$
A5	2.3514467×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0131
Δθ C,A'	0.0012
Δθ g,d	−0.0060
Δθ g,F	−0.0047
Δθ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.01643	0.00725	0.00661	0.01193
θ C,t	θ C,A'	θ d,C	θ e,C
0.733	0.323	0.295	0.532
ng-nd	ng-nF	nh-ng	ni-ng
0.02874	0.01293	0.01118	
θ g,d	θ g,F	θ h,g	θ i,g
1.282	0.577	0.499	
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.01746	0.01090	0.01182	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.768	0.480	0.520	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 610 (6)	転移点 Tg (℃) Transformation Point 648
ビッカース硬さ Hv Vickers Hardness 607	屈伏点 At (℃) Yielding Point 673
磨耗度 Ha Abrasion 70	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 75
ヤング率 E (10^8N/m^2) Young's Modulus 1178	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 460	
ポアソン比 σ Poisson Ratio 0.279	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 43/35
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 4.18
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.03 0	
350	0.09 1	0.00 2
360	0.34 8	0.07 1
370	0.59 3	0.27 0
380	0.74 8	0.48 5
390	0.83 8	0.64 3
400	0.89 0	0.74 7
420	0.93 7	0.85 1
440	0.95 8	0.89 9
460	0.96 9	0.92 6
480	0.97 8	0.94 6
500	0.98 5	0.96 4
550	0.99 3	0.98 2
600	0.99 5	0.98 7
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 3	0.93 6

788474 Schott Type	nd 1.78830	νd 47.4	nF−nC 0.01663
K-LaSFn16	ne 1.79226	νe 47.2	nF'−nC' 0.01679

屈折率 Refractive Indices		
nt	1014.0	1.77035
nA'	768.2	1.77769
nr	706.5	1.78049
nC	656.3	1.78330
nC'	643.9	1.78410
nD	589.3	1.78815
nd	587.6	1.78830
ne	546.1	1.79226
nF	486.1	1.79993
nF'	480.0	1.80089
ng	435.8	1.80915
nG'	434.1	
nh	404.7	1.81690
ni	365.0	1.83036

分散式の常数 Constans of Dispersion Formula	
A0	3.1239984
A1	$-1.4654892 \times 10^{-2}$
A2	2.5109176×10^{-2}
A3	8.8088136×10^{-4}
A4	$-5.4833245 \times 10^{-5}$
A5	4.1837812×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0114
Δθ C,A'	0.0033
Δθ g,d	−0.0138
Δθ g,F	−0.0118
Δθ i,g	−0.0474

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01295	0.00561	0.00500	0.00896
θ C,t	θ C,A'	θ d,C	θ e,C
0.779	0.337	0.301	0.539
ng−nd	ng−nF	nh−ng	ni−ng
0.02085	0.00922	0.00775	0.02121
θ g,d	θ g,F	θ h,g	θ i,g
1.254	0.554	0.466	1.275
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01375	0.00816	0.00863	0.02947
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.819	0.486	0.514	1.755

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 710 (7)	転移点 Tg (℃) Transformation Point 693
ビッカース硬さ Hv Vickers Hardness 692	屈伏点 At (℃) Yielding Point 714
磨耗度 Ha Abrasion 70	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 72
ヤング率 E (10^8N/m^2) Young's Modulus 1224	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 473	
ポアソン比 σ Poisson Ratio 0.294	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 39/32
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 4.76
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.05 0	
330	0.12 2	
340	0.37 1	0.08 4
350	0.60 0	0.27 9
360	0.75 3	0.49 2
370	0.84 9	0.66 4
380	0.90 7	0.78 3
390	0.93 9	0.85 4
400	0.95 7	0.89 6
420	0.97 1	0.93 0
440	0.97 7	0.94 4
460	0.98 1	0.95 4
480	0.98 2	0.95 7
500	0.98 5	0.96 4
550	0.98 8	0.97 1
600	0.98 8	0.97 1
650	0.99 2	0.98 2
700	0.99 4	0.98 5
800	0.99 7	0.99 2
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.96 8	0.92 3

883409 Schott Type K-LaSFn17	nd 1.88300	νd 40.9	nF-nC 0.02157
	ne 1.88812	νe 40.7	nF'-nC' 0.02182

屈折率 Refractive Indices		
nt	1014.0	1.86052
nA'	768.2	1.86945
nr	706.5	1.87299
nC	656.3	1.87656
nC'	643.9	1.87759
nD	589.3	1.88281
nd	587.6	1.88300
ne	546.1	1.88812
nF	486.1	1.89813
nF'	480.0	1.89941
ng	435.8	1.91033
nG'	434.1	
nh	404.7	1.92070
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	3.4368432
A1	$-1.2233385 \times 10^{-2}$
A2	3.8273465×10^{-2}
A3	$-7.3514740 \times 10^{-5}$
A4	1.2784766×10^{-4}
A5	$-4.2235029 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0065
Δθ C,A'	0.0031
Δθ g,d	−0.0134
Δθ g,F	−0.0102
Δθ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC-nt	nC-nA'	nd-nC	ne-nC
0.01604	0.00711	0.00644	0.01156
θ C,t	θ C,A'	θ d,C	θ e,C
0.744	0.330	0.299	0.536
ng-nd	ng-nF	nh-ng	ni-ng
0.02733	0.01220	0.01037	
θ g,d	θ g,F	θ h,g	θ i,g
1.267	0.566	0.481	
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.01707	0.01053	0.01129	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.782	0.483	0.517	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 689 (7)	転移点 Tg (℃) Transformation Point 703
ビッカース硬さ Hv Vickers Hardness 690	屈伏点 At (℃) Yielding Point 733
磨耗度 Ha Abrasion 60	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃) 79
ヤング率 E (10^8N/m^2) Young's Modulus 1290	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 496	
ポアソン比 σ Poisson Ratio 0.300	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 43/32
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 5.54
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300	0.00 7	
310	0.03 4	
320	0.17 5	0.01 2
330	0.33 0	0.06 2
340	0.49 6	0.17 4
350	0.64 3	0.33 2
360	0.76 1	0.50 5
370	0.83 8	0.64 3
380	0.89 3	0.75 3
390	0.92 6	0.82 5
400	0.94 6	0.87 2
420	0.96 5	0.91 6
440	0.97 3	0.93 5
460	0.98 0	0.95 1
480	0.98 4	0.96 1
500	0.98 8	0.97 1
550	0.99 2	0.98 0
600	0.99 2	0.98 0
650	0.99 3	0.98 5
700	0.99 5	0.98 9
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 6	0.99 2
2000	0.97 8	0.94 6

795452 Schott Type LaSFn19	nd 1.79500	ν d 45.2	nF−nC 0.01759
	ne 1.79918	ν e 44.9	nF'−nC' 0.01778

屈折率 Refractive Indices		
nt	1014.0	1.77628
nA'	768.2	1.78386
nr	706.5	1.78678
nC	656.3	1.78973
nC'	643.9	1.79057
nD	589.3	1.79484
nd	587.6	1.79500
ne	546.1	1.79918
nF	486.1	1.80732
nF'	480.0	1.80835
ng	435.8	1.81716
nG'	434.1	
nh	404.7	1.82545
ni	365.0	1.83992

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01345	0.00587	0.00527	0.00945
θ C,t	θ C,A'	θ d,C	θ e,C
0.765	0.334	0.300	0.537
ng−nd	ng−nF	nh−ng	ni−ng
0.02216	0.00984	0.00829	0.02276
θ g,d	θ g,F	θ h,g	θ i,g
1.260	0.559	0.471	1.294
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01429	0.00861	0.00917	0.03157
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.804	0.484	0.516	1.776

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.02_{9}	
340	0.17_{9}	0.01_{3}
350	0.42_{5}	0.11_{8}
360	0.60_{8}	0.28_{8}
370	0.75_{3}	0.49_{2}
380	0.84_{2}	0.65_{1}
390	0.89_{8}	0.76_{5}
400	0.93_{2}	0.83_{8}
420	0.96_{1}	0.90_{6}
440	0.97_{1}	0.93_{0}
460	0.97_{8}	0.94_{7}
480	0.98_{2}	0.95_{7}
500	0.98_{5}	0.96_{4}
550	0.99_{0}	0.97_{5}
600	0.99_{1}	0.97_{8}
650	0.99_{2}	0.98_{2}
700	0.99_{5}	0.98_{9}
800	0.99_{8}	0.99_{6}
1060	0.99_{8}	0.99_{6}
1500	0.99_{8}	0.99_{6}
2000	0.97_{8}	0.94_{7}

分散式の常数 Constans of Dispersion Formula	
A0	3.1431920
A1	$-1.4183025 \times 10^{-2}$
A2	2.6385108×10^{-2}
A3	1.0026117×10^{-3}
A4	$-5.9283957 \times 10^{-5}$
A5	4.5866331×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0076
$\Delta\theta$ C,A'	0.0023
$\Delta\theta$ g,d	−0.0121
$\Delta\theta$ g,F	−0.0101
$\Delta\theta$ i,g	−0.0460

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 615 (6)	転移点 Tg (℃) Transformation Point 666
ビッカース硬さ Hv Vickers Hardness 599	屈伏点 At (℃) Yielding Point 698
磨耗度 Ha Abrasion 80	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 77
ヤング率 E (10^8N/m^2) Young's Modulus 1173	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 451	
ポアソン比 σ Poisson Ratio 0.299	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 40/33
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 4.57
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

850324 Schott Type LaSFn21	nd 1.85000	νd 32.4	nF−nC 0.02623
	ne 1.85621	νe 32.2	nF'−nC' 0.02662

屈折率 Refractive Indices		
nt	1014.0	1.82374
nA'	768.2	1.83405
nr	706.5	1.83815
nC	656.3	1.84235
nC'	643.9	1.84355
nD	589.3	1.84977
nd	587.6	1.85000
ne	546.1	1.85621
nF	486.1	1.86858
nF'	480.0	1.87017
ng	435.8	1.88411
nG'	434.1	
nh	404.7	1.89773
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	3.3072284
A1	$-1.7620663 \times 10^{-2}$
A2	3.5742443×10^{-2}
A3	2.3922170×10^{-3}
A4	$-1.3426424 \times 10^{-4}$
A5	1.4464388×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0121
Δθ C,A'	−0.0002
Δθ g,d	0.0030
Δθ g,F	0.0036
Δθ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01861	0.00830	0.00765	0.01386
θ C,t	θ C,A'	θ d,C	θ e,C
0.709	0.316	0.292	0.528
ng−nd	ng−nF	nh−ng	ni−ng
0.03411	0.01553	0.01362	
θ g,d	θ g,F	θ h,g	θ i,g
1.300	0.592	0.519	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01981	0.01266	0.01396	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.744	0.476	0.524	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 580 (6)	転移点 Tg (℃) Transformation Point 621
ビッカース硬さ Hv Vickers Hardness 601	屈伏点 At (℃) Yielding Point 656
磨耗度 Ha Abrasion 110	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 76
ヤング率 E (10^8N/m^2) Young's Modulus 1028	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 400	
ポアソン比 σ Poisson Ratio 0.284	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 48/37
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 4.74
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370	0.03 6	
380	0.23 4	0.02 6
390	0.49 5	0.17 3
400	0.69 0	0.39 6
420	0.86 5	0.69 7
440	0.92 6	0.82 6
460	0.95 3	0.88 7
480	0.97 1	0.93 0
500	0.98 2	0.95 7
550	0.99 5	0.98 9
600	0.99 7	0.99 2
650	0.99 7	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 4	0.98 5
1500	0.99 1	0.97 9
2000	0.96 7	0.92 0

898340 Schott Type	nd 1.89800	νd 34.0	nF−nC 0.02640
LaSFn22	ne 1.90425	νe 33.8	nF'−nC' 0.02677

屈折率 Refractive Indices

nt	1014.0	1.87144
nA'	768.2	1.88184
nr	706.5	1.88600
nC	656.3	1.89026
nC'	643.9	1.89146
nD	589.3	1.89776
nd	587.6	1.89800
ne	546.1	1.90425
nF	486.1	1.91666
nF'	480.0	1.91823
ng	435.8	1.93210
nG'	434.1	
nh	404.7	1.94552
ni	365.0	

分散式の常数 Constans of Dispersion Formula

A0	3.4810353
A1	$-1.7197960 \times 10^{-2}$
A2	3.7737318×10^{-2}
A3	2.5131120×10^{-3}
A4	$-1.7521863 \times 10^{-4}$
A5	1.6219463×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions

Δθ C,t	0.0080
Δθ C,A'	0.0004
Δθ g,d	−0.0025
Δθ g,F	−0.0013
Δθ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01882	0.00842	0.00774	0.01399
θ C,t	θ C,A'	θ d,C	θ e,C
0.713	0.319	0.293	0.530
ng−nd	ng−nF	nh−ng	ni−ng
0.03410	0.01544	0.01342	
θ g,d	θ g,F	θ h,g	θ i,g
1.292	0.585	0.508	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.02002	0.01279	0.01398	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.748	0.478	0.522	

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	705 (7)
ビッカース硬さ Hv Vickers Hardness	741
磨耗度 Ha Abrasion	80
ヤング率 E (10^8N/m^2) Young's Modulus	1212
剛性率 G (10^8N/m^2) Modulus of Rigidity	468
ポアソン比 σ Poisson Ratio	0.294

化学的性質 Chemical Properties

耐水性(粉末法) RW Water Resistance	1
耐酸性(粉末法) RA Acid Resistance	1
耐候性(表面法) DW Weather Resistance	1

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	649
屈伏点 At (℃) Yielding Point	680
線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃)	76
備考 Remark s	

その他 Other Properties

泡 B Bubbles	
着色度 C Color Degree	50/37
比重 S.g Specific Gravity	5.19
脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370	0.09 3	
380	0.31 9	0.05 7
390	0.54 0	0.21 4
400	0.70 1	0.41 1
420	0.84 6	0.65 9
440	0.90 1	0.77 1
460	0.92 6	0.82 6
480	0.94 7	0.87 4
500	0.95 7	0.89 6
550	0.97 4	0.93 7
600	0.98 2	0.95 7
650	0.98 5	0.96 4
700	0.99 0	0.97 5
800	0.99 7	0.99 2
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 4	0.93 7

613438 Schott Type	nd 1.61340	ν d 43.8	nF−nC 0.01399
KzFS4	ne 1.61673	ν e 43.6	nF'−nC' 0.01416

屈折率 Refractive Indices		
nt	1014.0	1.59807
nA'	768.2	1.60445
nr	706.5	1.60682
nC	656.3	1.60920
nC'	643.9	1.60986
nD	589.3	1.61328
nd	587.6	1.61340
ne	546.1	1.61673
nF	486.1	1.62319
nF'	480.0	1.62402
ng	435.8	1.63107
nG'	434.1	
nh	404.7	1.63776
ni	365.0	1.64958

分散式の常数 Constans of Dispersion Formula	
A0	2.5481255
A1	$-1.3018925 \times 10^{-2}$
A2	1.9201990×10^{-2}
A3	4.2939978×10^{-4}
A4	4.2019946×10^{-6}
A5	1.4610142×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0448
$\Delta\theta$ C,A'	0.0096
$\Delta\theta$ g,d	−0.0116
$\Delta\theta$ g,F	−0.0082
$\Delta\theta$ i,g	−0.0273

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01113	0.00475	0.00420	0.00753
θ C,t	θ C,A'	θ d,C	θ e,C
0.796	0.340	0.300	0.538
ng−nd	ng−nF	nh−ng	ni−ng
0.01767	0.00788	0.00669	0.01851
θ g,d	θ g,F	θ h,g	θ i,g
1.263	0.563	0.478	1.323
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01179	0.00687	0.00729	0.02556
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.833	0.485	0.515	1.805

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 399 (4)	転移点 Tg (℃) Transformation Point 516
ビッカース硬さ Hv Vickers Hardness 445	屈伏点 At (℃) Yielding Point 558
磨耗度 Ha Abrasion 90	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 49
ヤング率 E (10^8N/m^2) Young's Modulus 620	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 247	
ポアソン比 σ Poisson Ratio 0.257	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 2	着色度 C Color Degree 37/32
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.15
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.01 3	
320	0.24 1	0.02 8
330	0.52 8	0.20 3
340	0.71 4	0.43 0
350	0.82 6	0.62 0
360	0.89 4	0.75 6
370	0.93 6	0.84 8
380	0.96 3	0.91 0
390	0.97 5	0.94 0
400	0.98 2	0.95 7
420	0.99 1	0.97 8
440	0.99 2	0.98 2
460	0.99 5	0.98 9
480	0.99 7	0.99 2
500	0.99 8	0.99 6
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 4	0.98 5
2000	0.92 2	0.81 7

740317 Schott Type KzFS50	nd 1.74000	ν d 31.7	nF−nC 0.02335
	ne 1.74552	ν e 31.5	nF'−nC' 0.02367

屈折率 Refractive Indices		
nt	1014.0	1.71678
nA'	768.2	1.72580
nr	706.5	1.72944
nC	656.3	1.73318
nC'	643.9	1.73426
nD	589.3	1.73980
nd	587.6	1.74000
ne	546.1	1.74552
nF	486.1	1.75653
nF'	480.0	1.75793
ng	435.8	1.77032
nG'	434.1	
nh	404.7	1.78240
ni	365.0	1.80455

分散式の常数 Constans of Dispersion Formula	
A0	2.9257039
A1	$-1.1234463 \times 10^{-2}$
A2	3.2931085×10^{-2}
A3	1.2267908×10^{-3}
A4	$-1.7664553 \times 10^{-5}$
A5	7.3704739×10^{-6}

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0083
$\Delta\theta$ C,A'	0.0002
$\Delta\theta$ g,d	−0.0003
$\Delta\theta$ g,F	0.0010
$\Delta\theta$ i,g	0.0214

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01640	0.00738	0.00682	0.01234
θ C,t	θ C,A'	θ d,C	θ e,C
0.702	0.316	0.292	0.528
ng−nd	ng−nF	nh−ng	ni−ng
0.03032	0.01379	0.01208	0.03423
θ g,d	θ g,F	θ h,g	θ i,g
1.299	0.591	0.517	1.466
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01748	0.01126	0.01241	0.04662
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.738	0.476	0.524	1.970

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 412 (4)	転移点 Tg (℃) Transformation Point 478
ビッカース硬さ Hv Vickers Hardness 409	屈伏点 At (℃) Yielding Point 507
磨耗度 Ha Abrasion 150	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 61
ヤング率 E (10^8N/m^2) Young's Modulus 648	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 256	
ポアソン比 σ Poisson Ratio 0.266	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 39/34
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 4.47
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.04 8	
350	0.33 4	0.06 4
360	0.61 9	0.30 1
370	0.79 5	0.56 4
380	0.88 3	0.73 3
390	0.93 4	0.84 5
400	0.96 0	0.90 3
420	0.98 2	0.95 7
440	0.99 0	0.97 5
460	0.99 5	0.98 9
480	0.99 7	0.99 2
500	0.99 7	0.99 2
550	0.99 7	0.99 2
600	0.99 7	0.99 2
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 7	0.99 2
1500	0.98 5	0.96 4
2000	0.95 4	0.89 0

693337	nd 1.69320	νd 33.7	nF−nC 0.02056
K-CD45	ne 1.69806	νe 33.5	nF'−nC' 0.02086

屈折率 Refractive Indices

nt	1014.0	1.67254
nA'	768.2	1.68067
nr	706.5	1.68389
nC	656.3	1.68719
nC'	643.9	1.68813
nD	589.3	1.69302
nd	587.6	1.69320
ne	546.1	1.69806
nF	486.1	1.70775
nF'	480.0	1.70899
ng	435.8	1.71990
nG'	434.1	
nh	404.7	1.73062
ni	365.0	

分散式の常数 Constans of Dispersion Formula

A0	2.7863780
A1	$-1.3893689 \times 10^{-2}$
A2	2.3793683×10^{-2}
A3	2.4989264×10^{-3}
A4	$-2.4741799 \times 10^{-4}$
A5	2.0697130×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions

Δθ C,t	0.0091
Δθ C,A'	−0.0011
Δθ g,d	0.0038
Δθ g,F	0.0044
Δθ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01465	0.00652	0.00601	0.01087
θ C,t	θ C,A'	θ d,C	θ e,C
0.713	0.317	0.292	0.529
ng−nd	ng−nF	nh−ng	ni−ng
0.02670	0.01215	0.01072	
θ g,d	θ g,F	θ h,g	θ i,g
1.299	0.591	0.521	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01559	0.00993	0.01093	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.747	0.476	0.524	

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	562 (6)
ビッカース硬さ Hv Vickers Hardness	579
磨耗度 Ha Abrasion	200
ヤング率 E (10^8N/m^2) Young's Modulus	903
剛性率 G (10^8N/m^2) Modulus of Rigidity	358
ポアソン比 σ Poisson Ratio	0.260

化学的性質 Chemical Properties

耐水性(粉末法) RW Water Resistance	2
耐酸性(粉末法) RA Acid Resistance	1
耐候性(表面法) DW Weather Resistance	1

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	470
屈伏点 At (℃) Yielding Point	507
線膨張係数 α ×10^{-7} Thermal Expansion (100-300℃)	121
備考 Remark s	

その他 Other Properties

泡 B Bubbles	
着色度 C Color Degree	41/35
比重 S.g Specific Gravity	3.13
脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.00 1	
350	0.03 3	
360	0.27 0	0.03 8
370	0.55 1	0.22 5
380	0.72 7	0.45 0
390	0.82 4	0.61 7
400	0.88 1	0.72 8
420	0.94 0	0.85 8
440	0.96 1	0.90 6
460	0.97 1	0.93 0
480	0.98 0	0.95 1
500	0.98 6	0.96 6
550	0.99 4	0.98 6
600	0.99 4	0.98 6
650	0.99 4	0.98 6
700	0.99 4	0.98 7
800	0.99 6	0.99 1
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.96 9	0.92 4

723292	nd 1.72250	νd 29.2	nF−nC 0.02472
K-CD120	ne 1.72833	νe 29.0	nF'−nC' 0.02511

屈折率 Refractive Indices

nt	1014.0	1.69826
nA'	768.2	1.70764
nr	706.5	1.71143
nC	656.3	1.71534
nC'	643.9	1.71646
nD	589.3	1.72228
nd	587.6	1.72250
ne	546.1	1.72833
nF	486.1	1.74006
nF'	480.0	1.74157
ng	435.8	1.75498
nG'	434.1	
nh	404.7	1.76833
ni	365.0	

分散式の常数 Constans of Dispersion Formula

A0	2.8653288
A1	$-1.3005976 \times 10^{-2}$
A2	3.0940312×10^{-2}
A3	2.3043404×10^{-3}
A4	$-1.7506562 \times 10^{-4}$
A5	2.0685594×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions

Δθ C,t	0.0084
Δθ C,A'	−0.0015
Δθ g,d	0.0102
Δθ g,F	0.0103
Δθ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.01708	0.00770	0.00716	0.01299
θ C,t	θ C,A'	θ d,C	θ e,C
0.691	0.311	0.290	0.525
ng−nd	ng−nF	nh−ng	ni−ng
0.03248	0.01492	0.01335	
θ g,d	θ g,F	θ h,g	θ i,g
1.314	0.604	0.540	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01820	0.01187	0.01324	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.725	0.473	0.527	

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	555 (6)
ビッカース硬さ Hv Vickers Hardness	560
磨耗度 Ha Abrasion	180
ヤング率 E (10^8N/m^2) Young's Modulus	902
剛性率 G (10^8N/m^2) Modulus of Rigidity	359
ポアソン比 σ Poisson Ratio	0.254

化学的性質 Chemical Properties

耐水性(粉末法) RW Water Resistance	1
耐酸性(粉末法) RA Acid Resistance	1
耐候性(表面法) DW Weather Resistance	1

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	508
屈伏点 At (℃) Yielding Point	549
線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃)	119
備考 Remark s	

その他 Other Properties

泡 B Bubbles	
着色度 C Color Degree	43/36
比重 S.g Specific Gravity	3.01
脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360	0.02 6	
370	0.25 3	0.03 2
380	0.52 5	0.19 9
390	0.70 3	0.41 5
400	0.80 8	0.58 8
420	0.91 4	0.79 8
440	0.95 4	0.89 0
460	0.97 0	0.92 7
480	0.98 1	0.95 4
500	0.99 0	0.97 5
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 2
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 5	0.98 9
1500	0.99 1	0.97 8
2000	0.96 0	0.90 3

587596	nd 1.58650	νd 59.6	nF−nC 0.00984
K-CSK12	ne 1.58884	νe 59.3	nF'−nC' 0.00993

屈折率 Refractive Indices

nt	1014.0	1.57529
nA'	768.2	1.58005
nr	706.5	1.58178
nC	656.3	1.58349
nC'	643.9	1.58397
nD	589.3	1.58641
nd	587.6	1.58650
ne	546.1	1.58884
nF	486.1	1.59333
nF'	480.0	1.59390
ng	435.8	1.59867
nG'	434.1	
nh	404.7	1.60307
ni	365.0	1.61059

分散式の常数 Constans of Dispersion Formula

A0	2.4800407
A1	−1.1143481 ×10 $^{-2}$
A2	1.2840310 ×10 $^{-2}$
A3	5.3343187 ×10 $^{-4}$
A4	−4.4087421 ×10 $^{-5}$
A5	2.4141463 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions

Δθ C,t	0.0091
Δθ C,A'	0.0015
Δθ g,d	−0.0064
Δθ g,F	−0.0054
Δθ i,g	−0.0168

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.00820	0.00344	0.00301	0.00535
θ C,t	θ C,A'	θ d,C	θ e,C
0.833	0.350	0.306	0.544
ng−nd	ng−nF	nh−ng	ni−ng
0.01217	0.00534	0.00440	0.01192
θ g,d	θ g,F	θ h,g	θ i,g
1.237	0.543	0.447	1.211
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00868	0.00487	0.00506	0.01669
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.874	0.490	0.510	1.681

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	582 (6)
ビッカース硬さ Hv Vickers Hardness	572
磨耗度 Ha Abrasion	110
ヤング率 E (10^8N/m^2) Young's Modulus	930
剛性率 G (10^8N/m^2) Modulus of Rigidity	372
ポアソン比 σ Poisson Ratio	0.250

化学的性質 Chemical Properties

耐水性(粉末法) RW Water Resistance	1
耐酸性(粉末法) RA Acid Resistance	4
耐候性(表面法) DW Weather Resistance	2

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	489
屈伏点 At (℃) Yielding Point	525
線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃)	95
備考 Remark s	

その他 Other Properties

泡 B Bubbles	
着色度 C Color Degree	35/31
比重 S.g Specific Gravity	3.00
脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310	0.07 $_9$	
320	0.38 $_6$	0.09 $_2$
330	0.67 $_9$	0.38 $_1$
340	0.84 $_3$	0.65 $_4$
350	0.92 $_3$	0.81 $_8$
360	0.96 $_3$	0.91 $_2$
370	0.97 $_2$	0.93 $_2$
380	0.98 $_4$	0.96 $_2$
390	0.99 $_0$	0.97 $_5$
400	0.99 $_8$	0.99 $_6$
420	0.99 $_8$	0.99 $_6$
440	0.99 $_8$	0.99 $_6$
460	0.99 $_8$	0.99 $_6$
480	0.99 $_8$	0.99 $_6$
500	0.99 $_8$	0.99 $_6$
550	0.99 $_8$	0.99 $_6$
600	0.99 $_8$	0.99 $_6$
650	0.99 $_8$	0.99 $_6$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_4$	0.98 $_5$
1500	0.98 $_8$	0.97 $_1$
2000	0.96 $_5$	0.91 $_6$

587596	nd 1.58700	ν d 59.6	nF−nC 0.00985
K-CSK120	ne 1.58935	ν e 59.4	nF'−nC' 0.00993

屈折率 Refractive Indices		
nt	1014.0	1.57575
nA'	768.2	1.58048
nr	706.5	1.58224
nC	656.3	1.58398
nC'	643.9	1.58446
nD	589.3	1.58691
nd	587.6	1.58700
ne	546.1	1.58935
nF	486.1	1.59383
nF'	480.0	1.59439
ng	435.8	1.59917
nG'	434.1	
nh	404.7	1.60361
ni	365.0	1.61115

分散式の常数 Constans of Dispersion Formula	
A0	2.4738310
A1	$-7.4195677 \times 10^{-3}$
A2	1.8102711×10^{-2}
A3	$-1.0196185 \times 10^{-3}$
A4	1.6280277×10^{-4}
A5	$-7.6589188 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0113
$\Delta\theta$ C,A'	0.0073
$\Delta\theta$ g,d	−0.0077
$\Delta\theta$ g,F	−0.0059
$\Delta\theta$ i,g	−0.0120

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00823	0.00350	0.00302	0.00537
θ C,t	θ C,A'	θ d,C	θ e,C
0.836	0.355	0.307	0.545
ng−nd	ng−nF	nh−ng	ni−ng
0.01217	0.00534	0.00444	0.01198
θ g,d	θ g,F	θ h,g	θ i,g
1.236	0.542	0.451	1.216
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00871	0.00489	0.00504	0.01676
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.877	0.492	0.508	1.688

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 582 (6)	転移点 Tg (℃) Transformation Point 489
ビッカース硬さ Hv Vickers Hardness 572	屈伏点 At (℃) Yielding Point 525
磨耗度 Ha Abrasion 110	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 95
ヤング率 E (10^8N/m^2) Young's Modulus 930	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 372	
ポアソン比 σ Poisson Ratio 0.250	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 35/31
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.00
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.07 9	
320	0.38 6	0.09 2
330	0.67 9	0.38 1
340	0.84 3	0.65 4
350	0.92 3	0.81 8
360	0.96 3	0.91 2
370	0.97 2	0.93 2
380	0.98 4	0.96 2
390	0.99 0	0.97 5
400	0.99 8	0.99 6
420	0.99 8	0.99 6
440	0.99 8	0.99 6
460	0.99 8	0.99 6
480	0.99 8	0.99 6
500	0.99 8	0.99 6
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 4	0.98 5
1500	0.98 8	0.97 1
2000	0.96 5	0.91 6

694563	nd 1.69400	νd 56.3	nF−nC 0.01233
K-LaFK55	ne 1.69694	νe 56.0	nF'−nC' 0.01244

屈折率 Refractive Indices		
nt	1014.0	1.68014
nA'	768.2	1.68597
nr	706.5	1.68812
nC	656.3	1.69024
nC'	643.9	1.69084
nD	589.3	1.69389
nd	587.6	1.69400
ne	546.1	1.69694
nF	486.1	1.70257
nF'	480.0	1.70328
ng	435.8	1.70930
nG'	434.1	
nh	404.7	1.71489
ni	365.0	1.72447

分散式の常数 Constans of Dispersion Formula	
A0	2.8178231
A1	−1.2892310 ×10 $^{-2}$
A2	1.8517287 ×10 $^{-2}$
A3	3.1052600 ×10 $^{-4}$
A4	−1.4481387 ×10 $^{-6}$
A5	5.7649424 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0104
Δθ C,A'	0.0021
Δθ g,d	−0.0089
Δθ g,F	−0.0072
Δθ i,g	−0.0236

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01010	0.00427	0.00376	0.00670
θ C,t	θ C,A'	θ d,C	θ e,C
0.819	0.346	0.305	0.543
ng−nd	ng−nF	nh−ng	ni−ng
0.01530	0.00673	0.00559	0.01517
θ g,d	θ g,F	θ h,g	θ i,g
1.241	0.546	0.453	1.230
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01070	0.00610	0.00634	0.02119
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.860	0.490	0.510	1.703

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 637 (6)	転移点 Tg (℃) Transformation Point 514
ビッカース硬さ Hv Vickers Hardness 681	屈伏点 At (℃) Yielding Point 556
磨耗度 Ha Abrasion 100	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 95
ヤング率 E (10^{8}N/m^2) Young's Modulus 1183	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 461	
ポアソン比 σ Poisson Ratio 0.284	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 37/29
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 4.38
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280	0.01 $_1$	
290	0.04 $_8$	
300	0.10 $_5$	
310	0.16 $_4$	0.01 $_1$
320	0.37 $_3$	0.08 $_5$
330	0.54 $_5$	0.21 $_9$
340	0.69 $_9$	0.40 $_9$
350	0.81 $_8$	0.60 $_5$
360	0.89 $_8$	0.76 $_5$
370	0.94 $_4$	0.86 $_7$
380	0.97 $_0$	0.92 $_7$
390	0.98 $_2$	0.95 $_7$
400	0.99 $_1$	0.97 $_8$
420	0.99 $_8$	0.99 $_6$
440	0.99 $_8$	0.99 $_6$
460	0.99 $_8$	0.99 $_6$
480	0.99 $_8$	0.99 $_6$
500	0.99 $_8$	0.99 $_6$
550	0.99 $_8$	0.99 $_6$
600	0.99 $_8$	0.99 $_6$
650	0.99 $_8$	0.99 $_6$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_7$	0.99 $_2$
1060	0.99 $_5$	0.98 $_9$
1500	0.99 $_2$	0.98 $_2$
2000	0.96 $_7$	0.92 $_0$

632638	nd 1.63246	νd 63.8	nF−nC 0.00992
K-LaFK60	ne 1.63483	νe 63.5	nF'−nC' 0.01000

屈折率 Refractive Indices		
nt	1014.0	1.62126
nA'	768.2	1.62598
nr	706.5	1.62772
nC	656.3	1.62944
nC'	643.9	1.62992
nD	589.3	1.63237
nd	587.6	1.63246
ne	546.1	1.63483
nF	486.1	1.63936
nF'	480.0	1.63992
ng	435.8	1.64473
nG'	434.1	
nh	404.7	1.64919
ni	365.0	1.65674

分散式の常数 Constans of Dispersion Formula	
A0	2.6242925
A1	−1.0010207 ×10 $^{-2}$
A2	1.4759497 ×10 $^{-2}$
A3	1.2162863 ×10 $^{-4}$
A4	1.5383339 ×10 $^{-5}$
A5	−7.2592822 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	−0.0190
Δθ C,A'	−0.0041
Δθ g,d	0.0020
Δθ g,F	−0.0006
Δθ i,g	0.0147

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00818	0.00346	0.00302	0.00539
θ C,t	θ C,A'	θ d,C	θ e,C
0.825	0.349	0.304	0.543
ng−nd	ng−nF	nh−ng	ni−ng
0.01227	0.00537	0.00446	0.01201
θ g,d	θ g,F	θ h,g	θ i,g
1.237	0.541	0.450	1.211
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00866	0.00491	0.00509	0.01682
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.866	0.491	0.509	1.682

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 547 (5)	転移点 Tg (℃) Transformation Point 485
ビッカース硬さ Hv Vickers Hardness 570	屈伏点 At (℃) Yielding Point 528
磨耗度 Ha Abrasion 180	線膨張係数 α ×10^{-7} Thermal Expansion (100-300℃) 114
ヤング率 E (10^{8}N/m^2) Young's Modulus 997	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 387	
ポアソン比 σ Poisson Ratio 0.288	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 38/28
耐酸性(粉末法) RA Acid Resistance 5	比重 S.g Specific Gravity 4.32
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270	0.05 $_8$	
280	0.07 $_8$	
290	0.16 $_9$	0.01 $_1$
300	0.27 $_7$	0.04 $_0$
310	0.36 $_5$	0.08 $_0$
320	0.58 $_1$	0.25 $_7$
330	0.70 $_6$	0.41 $_9$
340	0.77 $_9$	0.53 $_6$
350	0.82 $_2$	0.61 $_3$
360	0.84 $_8$	0.66 $_2$
370	0.88 $_0$	0.72 $_8$
380	0.91 $_2$	0.79 $_5$
390	0.94 $_3$	0.86 $_4$
400	0.96 $_5$	0.91 $_6$
420	0.98 $_2$	0.95 $_7$
440	0.99 $_1$	0.97 $_8$
460	0.99 $_5$	0.98 $_9$
480	0.99 $_7$	0.99 $_2$
500	0.99 $_8$	0.99 $_6$
550	0.99 $_8$	0.99 $_6$
600	0.99 $_8$	0.99 $_6$
650	0.99 $_8$	0.99 $_6$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_5$	0.98 $_9$
2000	0.97 $_7$	0.94 $_4$

518635	nd 1.51760	νd 63.5	nF−nC 0.00815
K-PBK40	ne 1.51954	νe 63.4	nF'−nC' 0.00820

屈折率 Refractive Indices		
nt	1014.0	1.50795
nA'	768.2	1.51216
nr	706.5	1.51364
nC	656.3	1.51508
nC'	643.9	1.51550
nD	589.3	1.51753
nd	587.6	1.51760
ne	546.1	1.51954
nF	486.1	1.52323
nF'	480.0	1.52370
ng	435.8	1.52758
nG'	434.1	
nh	404.7	1.53116
ni	365.0	1.53718

分散式の常数 Constans of Dispersion Formula	
A0	2.2735478
A1	−1.0246004 ×10 $^{-2}$
A2	1.1125548 ×10 $^{-2}$
A3	7.1357164 ×10 $^{-5}$
A4	1.3279862 ×10 $^{-5}$
A5	−7.5548313 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0324
Δθ C,A'	0.0057
Δθ g,d	−0.0109
Δθ g,F	−0.0085
Δθ i,g	−0.0200

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00713	0.00292	0.00252	0.00446
θ C,t	θ C,A'	θ d,C	θ e,C
0.875	0.358	0.309	0.547
ng−nd	ng−nF	nh−ng	ni−ng
0.00998	0.00435	0.00358	0.00960
θ g,d	θ g,F	θ h,g	θ i,g
1.225	0.534	0.439	1.178
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00755	0.00404	0.00416	0.01348
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.921	0.493	0.507	1.644

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 615 (6)	転移点 Tg (℃) Transformation Point 501
ビッカース硬さ Hv Vickers Hardness 606	屈伏点 At (℃) Yielding Point 549
磨耗度 Ha Abrasion 70	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 73
ヤング率 E (10^{8}N/m^2) Young's Modulus 799	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 325	
ポアソン比 σ Poisson Ratio 0.229	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 33/29
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 2.39
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280	0.01 $_1$	
290	0.10 $_0$	
300	0.29 $_4$	0.04 $_7$
310	0.53 $_4$	0.20 $_8$
320	0.72 $_0$	0.44 $_0$
330	0.84 $_6$	0.65 $_9$
340	0.91 $_5$	0.80 $_1$
350	0.95 $_7$	0.89 $_6$
360	0.97 $_8$	0.94 $_7$
370	0.98 $_8$	0.97 $_1$
380	0.98 $_8$	0.97 $_1$
390	0.99 $_0$	0.97 $_5$
400	0.99 $_1$	0.97 $_8$
420	0.99 $_1$	0.97 $_8$
440	0.99 $_1$	0.97 $_8$
460	0.99 $_1$	0.97 $_8$
480	0.99 $_1$	0.97 $_8$
500	0.99 $_1$	0.97 $_8$
550	0.99 $_2$	0.98 $_2$
600	0.99 $_2$	0.98 $_2$
650	0.99 $_2$	0.98 $_2$
700	0.99 $_5$	0.98 $_9$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_8$	0.99 $_6$
2000	0.99 $_8$	0.99 $_6$

523623	nd 1.52250	ν d 62.3	nF−nC 0.00839
K-PBK50	ne 1.52451	ν e 62.0	nF'−nC' 0.00846

屈折率 Refractive Indices		
nt	1014.0	1.51263
nA'	768.2	1.51691
nr	706.5	1.51843
nC	656.3	1.51992
nC'	643.9	1.52033
nD	589.3	1.52243
nd	587.6	1.52250
ne	546.1	1.52451
nF	486.1	1.52831
nF'	480.0	1.52879
ng	435.8	1.53281
nG'	434.1	
nh	404.7	1.53652
ni	365.0	1.54282

分散式の常数 Constans of Dispersion Formula	
A0	2.2871694
A1	$-1.0127516 \times 10^{-2}$
A2	1.1502490×10^{-2}
A3	1.0619951×10^{-4}
A4	5.4365429×10^{-6}
A5	$-4.3955731 \times 10^{-8}$

異常分散性 Deviation of Relative Partial Dispersions	
$\Delta\theta$ C,t	0.0322
$\Delta\theta$ C,A'	0.0076
$\Delta\theta$ g,d	−0.0090
$\Delta\theta$ g,F	−0.0077
$\Delta\theta$ i,g	−0.0144

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00729	0.00301	0.00258	0.00459
θ C,t	θ C,A'	θ d,C	θ e,C
0.869	0.359	0.308	0.547
ng−nd	ng−nF	nh−ng	ni−ng
0.01031	0.00450	0.00371	0.01001
θ g,d	θ g,F	θ h,g	θ i,g
1.229	0.536	0.442	1.193
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00770	0.00418	0.00428	0.01403
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.910	0.494	0.506	1.658

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 514 (5)	転移点 Tg (℃) Transformation Point 481
ビッカース硬さ Hv Vickers Hardness 493	屈伏点 At (℃) Yielding Point 518
磨耗度 Ha Abrasion 87	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 92
ヤング率 E (10^8N/m^2) Young's Modulus 762	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 312	
ポアソン比 σ Poisson Ratio 0.222	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 3	着色度 C Color Degree 34/29
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 2.43
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270	0.00 9	
280	0.01 7	
290	0.07 8	0.00 1
300	0.23 2	0.02 6
310	0.45 3	0.13 8
320	0.65 8	0.35 1
330	0.80 3	0.57 8
340	0.89 1	0.75 1
350	0.94 2	0.86 2
360	0.97 2	0.93 3
370	0.98 2	0.95 6
380	0.98 8	0.97 2
390	0.99 3	0.98 3
400	0.99 3	0.98 3
420	0.99 3	0.98 3
440	0.99 3	0.98 3
460	0.99 5	0.98 9
480	0.99 5	0.98 9
500	0.99 6	0.99 2
550	0.99 7	0.99 3
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 5	0.98 8
2000	0.96 4	0.91 4

Optical Glass for Precision Molding

スーパー ヴィドロン
SUPER VIDRON K-PG325

507705	nd	1.50670	ν d	70.5	nF−nC 0.00719
K-PG325	ne	1.50841	ν e	70.2	nF'−nC' 0.00724

屈折率 Refractive Indices

nt	1014.0	1.49854
nA'	768.2	1.50199
nr	706.5	1.50325
nC	656.3	1.50450
nC'	643.9	1.50485
nD	589.3	1.50663
nd	587.6	1.50670
ne	546.1	1.50841
nF	486.1	1.51169
nF'	480.0	1.51209
ng	435.8	1.51556
nG'	434.1	
nh	404.7	1.51875
ni	365.0	1.52417

分散式の常数 Constans of Dispersion Formula

A0	2.2434589
A1	$-7.0701683 \times 10^{-3}$
A2	9.4827147×10^{-3}
A3	2.3641812×10^{-4}
A4	$-1.6710268 \times 10^{-5}$
A5	9.9315300×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	−0.0462
$\Delta\theta$ C,A'	−0.0116
$\Delta\theta$ g,d	0.0108
$\Delta\theta$ g,F	0.0064
$\Delta\theta$ i,g	0.0538

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.00596	0.00251	0.00220	0.00391
θ C,t	θ C,A'	θ d,C	θ e,C
0.829	0.349	0.306	0.544
ng−nd	ng−nF	nh−ng	ni−ng
0.00886	0.00387	0.00319	0.00861
θ g,d	θ g,F	θ h,g	θ i,g
1.232	0.538	0.444	1.197
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00631	0.00356	0.00368	0.01208
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.872	0.492	0.508	1.669

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	352 (4)	転移点 Tg (℃) Transformation Point	285
ビッカース硬さ Hv Vickers Hardness	376	屈伏点 At (℃) Yielding Point	310
磨耗度 Ha Abrasion	800.2	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (50−200℃)	173
ヤング率 E (10^8N/m^2) Young's Modulus	642	備考 Remark s	
剛性率 G (10^8N/m^2) Modulus of Rigidity	254		
ポアソン比 σ Poisson Ratio	0.265	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	34/30
耐酸性(粉末法) RA Acid Resistance	5	比重 S.g Specific Gravity	3.00
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280	0.00 1	
290	0.01 6	
300	0.08 4	0.00 2
310	0.26 4	0.03 6
320	0.52 2	0.19 7
330	0.74 3	0.47 6
340	0.88 2	0.73 2
350	0.94 6	0.87 2
360	0.97 2	0.93 3
370	0.98 5	0.96 4
380	0.99 0	0.97 7
390	0.99 0	0.97 7
400	0.99 2	0.98 1
420	0.99 2	0.98 1
440	0.99 2	0.98 1
460	0.99 4	0.98 7
480	0.99 4	0.98 7
500	0.99 6	0.99 0
550	0.99 6	0.99 1
600	0.99 6	0.99 1
650	0.99 6	0.99 1
700	0.99 6	0.99 1
800	0.99 6	0.99 1
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.99 7	0.99 3

Optical Glass for Precision Molding

ヴィドロン
VIDRON

K-PG375

543629	nd	1.54250	ν d	62.9	nF−nC	0.00862
K-PG375	ne	1.54455	ν e	62.6	nF'−nC'	0.00870

屈折率 Refractive Indices

nt	1014.0	1.53287
nA'	768.2	1.53688
nr	706.5	1.53838
nC	656.3	1.53987
nC'	643.9	1.54029
nD	589.3	1.54242
nd	587.6	1.54250
ne	546.1	1.54455
nF	486.1	1.54849
nF'	480.0	1.54899
ng	435.8	1.55318
nG'	434.1	
nh	404.7	1.55707
ni	365.0	1.56369

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.00700	0.00299	0.00263	0.00468
θ C,t	θ C,A'	θ d,C	θ e,C
0.812	0.347	0.305	0.543
ng−nd	ng−nF	nh−ng	ni−ng
0.01068	0.00469	0.00389	0.01051
θ g,d	θ g,F	θ h,g	θ i,g
1.239	0.544	0.451	1.219
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00742	0.00426	0.00444	0.01470
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.853	0.490	0.510	1.690

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300	0.02 8	
310	0.09 6	
320	0.24 4	0.02 9
330	0.45 8	0.14 2
340	0.68 0	0.38 2
350	0.83 2	0.63 1
360	0.91 8	0.80 8
370	0.96 0	0.90 4
380	0.97 9	0.95 0
390	0.99 0	0.97 5
400	0.99 0	0.97 7
420	0.99 0	0.97 7
440	0.99 0	0.97 6
460	0.99 2	0.98 0
480	0.99 3	0.98 4
500	0.99 6	0.99 0
550	0.99 7	0.99 3
600	0.99 6	0.99 0
650	0.99 5	0.98 8
700	0.99 6	0.99 0
800	0.99 7	0.99 3
1060	0.99 7	0.99 2
1500	0.99 0	0.97 6
2000	0.86 6	0.69 8

分散式の常数 Constans of Dispersion Formula

A0	2.3445396
A1	$-7.0376675 \times 10^{-3}$
A2	1.2749120×10^{-2}
A3	$-3.9729957 \times 10^{-5}$
A4	2.7427477×10^{-5}
A5	$-1.1100056 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	−0.0277
$\Delta\theta$ C,A'	−0.0051
$\Delta\theta$ g,d	0.0024
$\Delta\theta$ g,F	0.0010
$\Delta\theta$ i,g	0.0169

機械的性質 Mechanical Properties

ヌープ硬さ Hk
Knoop Hardness 368 (4)

ビッカース硬さ Hv
Vickers Hardness 428

磨耗度 Ha
Abrasion 620

ヤング率 E (10^8N/m^2)
Young's Modulus 625

剛性率 G (10^8N/m^2)
Modulus of Rigidity 249

ポアソン比 σ
Poisson Ratio 0.252

化学的性質 Chemical Properties

耐水性(粉末法) RW
Water Resistance 1

耐酸性(粉末法) RA
Acid Resistance 3

耐候性(表面法) DW
Weather Resistance 1

熱的性質 Thermal Properties

転移点 Tg (℃)
Transformation Point 343

屈伏点 At (℃)
Yielding Point 363

線膨張係数 $\alpha \times 10^{-7}$
Thermal Expansion
(50-250℃) 169

備考 Remark s

その他 Other Properties

泡 B
Bubbles

着色度 C
Color Degree 36/31

比重 S.g
Specific Gravity 2.90

脈理 S
Striae

907212	nd 1.90680	ν d 21.2	nF−nC 0.04287
K-PSFn1	ne 1.91689	ν e 21.0	nF'−nC' 0.04369

屈折率 Refractive Indices

nt	1014.0	1.86687
nA'	768.2	1.88192
nr	706.5	1.88815
nC	656.3	1.89467
nC'	643.9	1.89655
nD	589.3	1.90644
nd	587.6	1.90680
ne	546.1	1.91689
nF	486.1	1.93754
nF'	480.0	1.94024
ng	435.8	1.96461
nG'	434.1	
nh	404.7	1.98970
ni	365.0	

分散式の常数 Constans of Dispersion Formula

A0	3.4647134
A1	$-2.6786619 \times 10^{-2}$
A2	4.0795276×10^{-2}
A3	9.8163482×10^{-3}
A4	$-1.1095829 \times 10^{-3}$
A5	9.7817496×10^{-5}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0036
$\Delta\theta$ C,A'	−0.0063
$\Delta\theta$ g,d	0.0287
$\Delta\theta$ g,F	0.0262
$\Delta\theta$ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.02780	0.01275	0.01213	0.02222
θ C,t	θ C,A'	θ d,C	θ e,C
0.648	0.297	0.283	0.518
ng−nd	ng−nF	nh−ng	ni−ng
0.05781	0.02707	0.02509	
θ g,d	θ g,F	θ h,g	θ i,g
1.348	0.631	0.585	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.02968	0.02034	0.02335	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.679	0.466	0.534	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 444 (4)	転移点 Tg (℃) Transformation Point 498
ビッカース硬さ Hv Vickers Hardness 441	屈伏点 At (℃) Yielding Point 543
磨耗度 Ha Abrasion 310	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 102
ヤング率 E (10^8N/m^2) Young's Modulus 886	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 359	
ポアソン比 σ Poisson Ratio 0.233	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree (49)/39
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 4.15
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370		
380	0.00 4	
390	0.08 2	0.00 1
400	0.26 2	0.03 5
420	0.57 7	0.25 3
440	0.72 7	0.45 1
460	0.79 2	0.55 9
480	0.83 4	0.63 6
500	0.87 3	0.71 3
550	0.95 2	0.88 5
600	0.97 9	0.94 8
650	0.98 4	0.96 2
700	0.99 0	0.97 5
800	0.99 4	0.98 5
1060	0.99 8	0.99 6
1500	0.99 4	0.98 7
2000	0.97 5	0.93 9

着色度の()は透過率70%のときの波長を表す。

839239	nd 1.83917	νd 23.9	nF−nC 0.03517
K-PSFn3	ne 1.84746	νe 23.7	nF'−nC' 0.03581

屈折率 Refractive Indices		
nt	1014.0	1.80579
nA'	768.2	1.81846
nr	706.5	1.82369
nC	656.3	1.82915
nC'	643.9	1.83069
nD	589.3	1.83888
nd	587.6	1.83917
ne	546.1	1.84746
nF	486.1	1.86432
nF'	480.0	1.86650
ng	435.8	1.88619
nG'	434.1	
nh	404.7	1.90616
ni	365.0	

分散式の常数 Constans of Dispersion Formula	
A0	3.2302797
A1	−1.6072299 ×10 $^{-2}$
A2	4.5091861 ×10 $^{-2}$
A3	3.6569890 ×10 $^{-3}$
A4	−2.4619661 ×10 $^{-4}$
A5	3.6023486 ×10 $^{-5}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0067
Δθ C,A'	−0.0029
Δθ g,d	0.0225
Δθ g,F	0.0206
Δθ i,g	

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.02336	0.01069	0.01002	0.01831
θ C,t	θ C,A'	θ d,C	θ e,C
0.664	0.304	0.285	0.521
ng−nd	ng−nF	nh−ng	ni−ng
0.04702	0.02187	0.01997	
θ g,d	θ g,F	θ h,g	θ i,g
1.337	0.622	0.568	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.02490	0.01677	0.01904	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.695	0.468	0.532	

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 409 (4)	転移点 Tg (℃) Transformation Point 477
ビッカース硬さ Hv Vickers Hardness 397	屈伏点 At (℃) Yielding Point 515
磨耗度 Ha Abrasion 330	線膨張係数 α ×10^{-7} Thermal Expansion (100-300℃) 118
ヤング率 E (10^{8}N/m^2) Young's Modulus 883	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 351	
ポアソン比 σ Poisson Ratio 0.256	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree (43)/38
耐酸性(粉末法) RA Acid Resistance 1	比重 S.g Specific Gravity 3.90
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370		
380	0.10 $_9$	0.00 $_4$
390	0.33 $_3$	0.06 $_4$
400	0.53 $_7$	0.21 $_2$
420	0.77 $_0$	0.52 $_0$
440	0.87 $_0$	0.70 $_7$
460	0.91 $_4$	0.79 $_9$
480	0.93 $_7$	0.85 $_0$
500	0.95 $_5$	0.89 $_2$
550	0.98 $_2$	0.95 $_7$
600	0.99 $_0$	0.97 $_7$
650	0.99 $_3$	0.98 $_4$
700	0.99 $_3$	0.98 $_4$
800	0.99 $_5$	0.99 $_1$
1060	0.99 $_8$	0.99 $_5$
1500	0.99 $_4$	0.98 $_5$
2000	0.96 $_9$	0.92 $_5$

着色度の()は透過率70%のときの波長を表す。

566610	nd 1.56580	νd 61.0	nF−nC 0.00927
K-PSK11	ne 1.56801	νe 60.8	nF'−nC' 0.00934

屈折率 Refractive Indices		
nt	1014.0	1.55537
nA'	768.2	1.55977
nr	706.5	1.56138
nC	656.3	1.56298
nC'	643.9	1.56344
nD	589.3	1.56572
nd	587.6	1.56580
ne	546.1	1.56801
nF	486.1	1.57225
nF'	480.0	1.57278
ng	435.8	1.57730
nG'	434.1	
nh	404.7	1.58150
ni	365.0	1.58868

分散式の常数 Constans of Dispersion Formula	
A0	2.4159800
A1	$-9.1925712 \times 10^{-3}$
A2	1.2781645×10^{-2}
A3	2.2915227×10^{-4}
A4	$-1.6688365 \times 10^{-6}$
A5	3.1925636×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	−0.0100
Δθ C,A'	−0.0035
Δθ g,d	0.0002
Δθ g,F	−0.0012
Δθ i,g	0.0105

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00761	0.00321	0.00282	0.00503
θ C,t	θ C,A'	θ d,C	θ e,C
0.821	0.346	0.304	0.543
ng−nd	ng−nF	nh−ng	ni−ng
0.01150	0.00505	0.00420	0.01138
θ g,d	θ g,F	θ h,g	θ i,g
1.241	0.545	0.453	1.228
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00807	0.00457	0.00477	0.01590
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.864	0.489	0.511	1.702

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 430 (4)	転移点 Tg (℃) Transformation Point 410
ビッカース硬さ Hv Vickers Hardness 508	屈伏点 At (℃) Yielding Point 437
磨耗度 Ha Abrasion 340	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 93
ヤング率 E (10^8N/m^2) Young's Modulus 652	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 258	
ポアソン比 σ Poisson Ratio 0.264	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 34/31
耐酸性(粉末法) RA Acid Resistance 5	比重 S.g Specific Gravity 3.08
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310	0.11 4	
320	0.53 4	0.20 8
330	0.79 2	0.55 9
340	0.90 8	0.78 6
350	0.95 3	0.88 7
360	0.97 1	0.93 0
370	0.98 1	0.95 4
380	0.98 5	0.96 4
390	0.98 8	0.97 1
400	0.99 0	0.97 5
420	0.99 0	0.97 5
440	0.99 0	0.97 5
460	0.99 5	0.98 9
480	0.99 5	0.98 9
500	0.99 7	0.99 2
550	0.99 7	0.99 2
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 1	0.97 8
2000	0.90 4	0.77 7

594614	nd 1.59380	νd 61.4	nF−nC 0.00967
K-PSK50	ne 1.59611	νe 61.1	nF'−nC' 0.00975

屈折率 Refractive Indices		
nt	1014.0	1.58299
nA'	768.2	1.58750
nr	706.5	1.58918
nC	656.3	1.59086
nC'	643.9	1.59133
nD	589.3	1.59372
nd	587.6	1.59380
ne	546.1	1.59611
nF	486.1	1.60053
nF'	480.0	1.60108
ng	435.8	1.60579
nG'	434.1	
nh	404.7	1.61014
ni	365.0	1.61756

分散式の常数 Constans of Dispersion Formula	
A0	2.5004685
A1	−8.4722286 ×10 $^{-3}$
A2	1.4421864 ×10 $^{-2}$
A3	6.0030127 ×10 $^{-5}$
A4	1.7411953 ×10 $^{-5}$
A5	−5.7575039 ×10 $^{-7}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	−0.0188
Δθ C,A'	−0.0027
Δθ g,d	0.0003
Δθ g,F	−0.0014
Δθ i,g	0.0030

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00787	0.00336	0.00294	0.00525
θ C,t	θ C,A'	θ d,C	θ e,C
0.814	0.347	0.304	0.543
ng−nd	ng−nF	nh−ng	ni−ng
0.01199	0.00526	0.00435	0.01177
θ g,d	θ g,F	θ h,g	θ i,g
1.240	0.544	0.450	1.217
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00834	0.00478	0.00497	0.01648
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.855	0.490	0.510	1.690

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 388 (4)	転移点 Tg (℃) Transformation Point 381
ビッカース硬さ Hv Vickers Hardness 413	屈伏点 At (℃) Yielding Point 403
磨耗度 Ha Abrasion 410	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 112
ヤング率 E (10^{8}N/m^2) Young's Modulus 668	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 264	
ポアソン比 σ Poisson Ratio 0.264	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 34/29
耐酸性(粉末法) RA Acid Resistance 5	比重 S.g Specific Gravity 3.29
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280	0.01 $_1$	
290	0.06 $_6$	
300	0.20 $_9$	0.02 $_0$
310	0.42 $_5$	0.11 $_8$
320	0.64 $_4$	0.33 $_3$
330	0.81 $_2$	0.59 $_5$
340	0.90 $_8$	0.78 $_6$
350	0.95 $_7$	0.89 $_6$
360	0.97 $_5$	0.94 $_0$
370	0.98 $_5$	0.96 $_4$
380	0.98 $_8$	0.97 $_1$
390	0.99 $_0$	0.97 $_5$
400	0.99 $_2$	0.98 $_2$
420	0.99 $_2$	0.98 $_2$
440	0.99 $_2$	0.98 $_2$
460	0.99 $_2$	0.98 $_2$
480	0.99 $_5$	0.98 $_9$
500	0.99 $_5$	0.98 $_9$
550	0.99 $_7$	0.99 $_2$
600	0.99 $_7$	0.99 $_2$
650	0.99 $_8$	0.99 $_6$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_7$	0.99 $_2$
2000	0.91 $_9$	0.81 $_0$

592607	nd 1.59170	νd 60.7	nF−nC 0.00975
K-PSK100	ne 1.59403	νe 60.3	nF'−nC' 0.00985

屈折率 Refractive Indices		
nt	1014.0	1.58084
nA'	768.2	1.58536
nr	706.5	1.58705
nC	656.3	1.58873
nC'	643.9	1.58921
nD	589.3	1.59161
nd	587.6	1.59170
ne	546.1	1.59403
nF	486.1	1.59848
nF'	480.0	1.59906
ng	435.8	1.60382
nG'	434.1	
nh	404.7	1.60824
ni	365.0	1.61572

分散式の常数 Constans of Dispersion Formula	
A0	2.4921131
A1	−7.7271083 ×10 $^{-3}$
A2	1.5520581 ×10 $^{-2}$
A3	−2.8929892 ×10 $^{-4}$
A4	7.4178536 ×10 $^{-5}$
A5	−3.8093693 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	−0.0201
Δθ C,A'	−0.0037
Δθ g,d	0.0021
Δθ g,F	0.0012
Δθ i,g	0.0007

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.00789	0.00337	0.00297	0.00530
θ C,t	θ C,A'	θ d,C	θ e,C
0.809	0.346	0.305	0.544
ng−nd	ng−nF	nh−ng	ni−ng
0.01212	0.00534	0.00442	0.01190
θ g,d	θ g,F	θ h,g	θ i,g
1.243	0.548	0.453	1.221
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.00837	0.00482	0.00503	0.01666
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.850	0.489	0.511	1.691

機械的性質 Mechanical Properties		熱的性質 Thermal Properties	
ヌープ硬さ Hk Knoop Hardness	384 (4)	転移点 Tg (℃) Transformation Point	390
ビッカース硬さ Hv Vickers Hardness	390	屈伏点 At (℃) Yielding Point	415
磨耗度 Ha Abrasion	400	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃)	114
ヤング率 E (10^{8}N/m^2) Young's Modulus	700	備考 Remark s	
剛性率 G (10^{8}N/m^2) Modulus of Rigidity	227		
ポアソン比 σ Poisson Ratio	0.262	その他 Other Properties	
化学的性質 Chemical Properties		泡 B Bubbles	B
耐水性(粉末法) RW Water Resistance	1	着色度 C Color Degree	36/32
耐酸性(粉末法) RA Acid Resistance	6	比重 S.g Specific Gravity	3.24
耐候性(表面法) DW Weather Resistance	1	脈理 S Striae	

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320	0.01 $_5$	
330	0.17 $_4$	0.01 $_2$
340	0.51 $_3$	0.18 $_8$
350	0.77 $_6$	0.53 $_1$
360	0.90 $_2$	0.77 $_4$
370	0.94 $_7$	0.87 $_4$
380	0.96 $_7$	0.92 $_0$
390	0.98 $_1$	0.95 $_4$
400	0.98 $_2$	0.95 $_7$
420	0.98 $_4$	0.96 $_1$
440	0.99 $_1$	0.97 $_8$
460	0.99 $_2$	0.98 $_2$
480	0.99 $_2$	0.98 $_2$
500	0.99 $_2$	0.98 $_5$
550	0.99 $_4$	0.99 $_6$
600	0.99 $_8$	0.99 $_6$
650	0.99 $_8$	0.99 $_6$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_4$	0.98 $_6$
1500	0.97 $_5$	0.94 $_0$
2000	0.88 $_2$	0.73 $_0$

669554 MFA	nd 1.66910	νd 55.4	nF−nC 0.01208
K-VC78	ne 1.67197	νe 55.2	nF'−nC' 0.01217

屈折率 Refractive Indices

nt	1014.0	1.65558
nA'	768.2	1.66124
nr	706.5	1.66334
nC	656.3	1.66542
nC'	643.9	1.66602
nD	589.3	1.66899
nd	587.6	1.66910
ne	546.1	1.67197
nF	486.1	1.67750
nF'	480.0	1.67819
ng	435.8	1.68409
nG'	434.1	
nh	404.7	1.68956
ni	365.0	1.69891

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.00984	0.00418	0.00368	0.00655
θC,t	θC,A'	θd,C	θe,C
0.815	0.346	0.305	0.542
ng−nd	ng−nF	nh−ng	ni−ng
0.01499	0.00659	0.00547	0.01482
θg,d	θg,F	θh,g	θi,g
1.241	0.546	0.453	1.227
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01044	0.00595	0.00622	0.02072
θ'C',t	θ'e,C'	θ'F',e	θ'i,F'
0.858	0.489	0.511	1.703

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270	0.03 2	
280	0.11 1	
290	0.23 2	0.02 6
300	0.27 9	0.04 1
310	0.55 2	0.27 0
320	0.71 0	0.42 5
330	0.82 6	0.62 0
340	0.89 8	0.76 5
350	0.94 3	0.86 4
360	0.96 7	0.92 0
370	0.98 2	0.95 7
380	0.98 5	0.96 4
390	0.98 8	0.97 1
400	0.99 0	0.97 5
420	0.99 0	0.97 5
440	0.99 1	0.97 8
460	0.99 4	0.98 5
480	0.99 5	0.98 9
500	0.99 5	0.98 9
550	0.99 5	0.98 9
600	0.99 7	0.99 2
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 5	0.98 9
2000	0.96 8	0.92 3

分散式の常数 Constans of Dispersion Formula

A0	2.7351361
A1	−1.1822071 ×10 −2
A2	1.8279111 ×10 −2
A3	1.7985842 ×10 −4
A4	1.6773012 ×10 −5
A5	−5.3070611 ×10 −7

異常分散性 Deviation of Relative Partial Dispersions

Δθ C,t	0.0100
Δθ C,A'	0.0028
Δθ g,d	−0.0107
Δθ g,F	−0.0088
Δθ i,g	−0.0340

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	561 (6)
ビッカース硬さ Hv Vickers Hardness	560
磨耗度 Ha Abrasion	110
ヤング率 E (10^8N/m^2) Young's Modulus	1061
剛性率 G (10^8N/m^2) Modulus of Rigidity	415
ポアソン比 σ Poisson Ratio	0.279

化学的性質 Chemical Properties

耐水性(粉末法) RW Water Resistance	1
耐酸性(粉末法) RA Acid Resistance	4
耐候性(表面法) DW Weather Resistance	2

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	520
屈伏点 At (℃) Yielding Point	556
線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃)	100
備考 Remark s	

その他 Other Properties

泡 B Bubbles	
着色度 C Color Degree	35/28
比重 S.g Specific Gravity	3.44
脈理 S Striae	

609578 MFA K-VC79	nd	1.60970	ν d	57.8	nF-nC	0.01055
	ne	1.61221	ν e	57.4	nF'-nC'	0.01067

屈折率 Refractive Indices

nt	1014.0	1.59777
nA'	768.2	1.60280
nr	706.5	1.60465
nC	656.3	1.60649
nC'	643.9	1.60698
nD	589.3	1.60960
nd	587.6	1.60970
ne	546.1	1.61221
nF	486.1	1.61704
nF'	480.0	1.61765
ng	435.8	1.62277
nG'	434.1	
nh	404.7	1.62754
ni	365.0	1.63565

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions

nC-nt	nC-nA'	nd-nC	ne-nC
0.00872	0.00369	0.00321	0.00572
θ C,t	θ C,A'	θ d,C	θ e,C
0.827	0.350	0.304	0.542
ng-nd	ng-nF	nh-ng	ni-ng
0.01307	0.00573	0.00477	0.01288
θ g,d	θ g,F	θ h,g	θ i,g
1.239	0.543	0.452	1.221
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.00921	0.00523	0.00544	0.01800
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.863	0.490	0.510	1.687

内部透過率 τ Internal Transmittance

λ nm	10mm	25mm
270	0.02 2	
280	0.10 3	
290	0.26 0	0.03 4
300	0.37 8	0.08 8
310	0.66 9	0.36 6
320	0.79 9	0.57 1
330	0.89 1	0.75 1
340	0.93 9	0.85 4
350	0.96 4	0.91 3
360	0.97 8	0.94 7
370	0.98 2	0.95 7
380	0.98 5	0.96 4
390	0.98 5	0.96 4
400	0.98 5	0.96 4
420	0.98 5	0.96 4
440	0.98 8	0.97 1
460	0.99 0	0.97 5
480	0.99 1	0.97 8
500	0.99 2	0.98 2
550	0.99 4	0.98 5
600	0.99 4	0.98 5
650	0.99 7	0.99 2
700	0.99 7	0.99 2
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 7	0.99 2
2000	0.97 8	0.94 7

分散式の常数 Constans of Dispersion Formula

A0	2.5493930
A1	$-1.0966263 \times 10^{-2}$
A2	1.4872612×10^{-2}
A3	3.1043762×10^{-4}
A4	$-9.0553419 \times 10^{-6}$
A5	6.7268873×10^{-7}

異常分散性 Deviation of Relative Partial Dispersions

$\Delta\theta$ C,t	0.0107
$\Delta\theta$ C,A'	0.0038
$\Delta\theta$ g,d	-0.0079
$\Delta\theta$ g,F	-0.0076
$\Delta\theta$ i,g	-0.0214

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	599 (6)
ビッカース硬さ Hv Vickers Hardness	609
磨耗度 Ha Abrasion	120
ヤング率 E (10^8N/m^2) Young's Modulus	1008
剛性率 G (10^8N/m^2) Modulus of Rigidity	401
ポアソン比 σ Poisson Ratio	0.256

化学的性質 Chemical Properties

耐水性(粉末法) RW Water Resistance	1
耐酸性(粉末法) RA Acid Resistance	4
耐候性(表面法) DW Weather Resistance	2

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	516
屈伏点 At (℃) Yielding Point	553
線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100-300℃)	93
備考 Remark s	

その他 Other Properties

泡 B Bubbles	
着色度 C Color Degree	34/29
比重 S.g Specific Gravity	3.09
脈理 S Striae	

694531	nd 1.69384	νd 53.1	nF−nC 0.01306
K-VC80	ne 1.69696	νe 52.9	nF'−nC' 0.01317

屈折率 Refractive Indices		
nt	1014.0	1.67935
nA'	768.2	1.68539
nr	706.5	1.68764
nC	656.3	1.68989
nC'	643.9	1.69052
nD	589.3	1.69373
nd	587.6	1.69384
ne	546.1	1.69696
nF	486.1	1.70295
nF'	480.0	1.70369
ng	435.8	1.71012
nG'	434.1	
nh	404.7	1.71607
ni	365.0	1.72616

分散式の常数 Constans of Dispersion Formula	
A0	2.8122048
A1	$-1.1905846 \times 10^{-2}$
A2	2.0876738×10^{-2}
A3	$-1.2892548 \times 10^{-4}$
A4	7.9704899×10^{-5}
A5	$-4.4490242 \times 10^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0130
Δθ C,A'	0.0040
Δθ g,d	−0.0095
Δθ g,F	−0.0087
Δθ i,g	−0.0502

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01054	0.00450	0.00395	0.00707
θ C,t	θ C,A'	θ d,C	θ e,C
0.807	0.345	0.302	0.541
ng−nd	ng−nF	nh−ng	ni−ng
0.01628	0.00717	0.00595	0.01604
θ g,d	θ g,F	θ h,g	θ i,g
1.247	0.549	0.456	1.228
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01117	0.00644	0.00673	0.02247
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.848	0.489	0.511	1.706

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 531 (5)	転移点 Tg (℃) Transformation Point 530
ビッカース硬さ Hv Vickers Hardness 521	屈伏点 At (℃) Yielding Point 566
磨耗度 Ha Abrasion 120	線膨張係数 $\alpha \times 10^{-7}$ Thermal Expansion (100−300℃) 94
ヤング率 E (10^8N/m^2) Young's Modulus 1059	備考 Remark s
剛性率 G (10^8N/m^2) Modulus of Rigidity 416	
ポアソン比 σ Poisson Ratio 0.273	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 36/29
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.81
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280	0.03 6	
290	0.11 2	
300	0.24 7	0.03 0
310	0.32 1	0.05 8
320	0.57 7	0.25 3
330	0.71 1	0.42 6
340	0.81 5	0.60 0
350	0.88 8	0.74 3
360	0.93 1	0.83 8
370	0.95 7	0.89 5
380	0.97 4	0.93 6
390	0.98 1	0.95 4
400	0.98 6	0.96 6
420	0.99 0	0.97 6
440	0.99 2	0.98 1
460	0.99 6	0.99 0
480	0.99 8	0.99 6
500	0.99 8	0.99 6
550	0.99 8	0.99 6
600	0.99 8	0.99 6
650	0.99 8	0.99 6
700	0.99 8	0.99 6
800	0.99 8	0.99 6
1060	0.99 8	0.99 6
1500	0.99 8	0.99 6
2000	0.97 6	0.94 2

755456	nd 1.75512	νd 45.6	nF−nC 0.01656
K-VC81	ne 1.75906	νe 45.4	nF'−nC' 0.01673

屈折率 Refractive Indices		
nt	1014.0	1.73719
nA'	768.2	1.74453
nr	706.5	1.74733
nC	656.3	1.75014
nC'	643.9	1.75093
nD	589.3	1.75497
nd	587.6	1.75512
ne	546.1	1.75906
nF	486.1	1.76670
nF'	480.0	1.76766
ng	435.8	1.77593
nG'	434.1	
nh	404.7	1.78372
ni	365.0	1.79726

分散式の常数 Constans of Dispersion Formula	
A0	3.0049068
A1	−1.3104501 ×10 $^{-2}$
A2	2.7061268 ×10 $^{-2}$
A3	1.2975893 ×10 $^{-5}$
A4	7.0805863 ×10 $^{-5}$
A5	−2.1408122 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0231
Δθ C,A'	0.0069
Δθ g,d	−0.0145
Δθ g,F	−0.0115
Δθ i,g	−0.0487

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01295	0.00561	0.00498	0.00892
θ C,t	θ C,A'	θ d,C	θ e,C
0.782	0.339	0.301	0.539
ng−nd	ng−nF	nh−ng	ni−ng
0.02081	0.00923	0.00779	0.02133
θ g,d	θ g,F	θ h,g	θ i,g
1.257	0.557	0.470	1.288
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01374	0.00813	0.00860	0.02960
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.821	0.486	0.514	1.769

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 706 (7)	転移点 Tg (℃) Transformation Point 510
ビッカース硬さ Hv Vickers Hardness 669	屈伏点 At (℃) Yielding Point 549
磨耗度 Ha Abrasion 80	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 88
ヤング率 E (10^{8}N/m^2) Young's Modulus 1180	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 459	
ポアソン比 σ Poisson Ratio 0.284	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 39/31
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 4.27
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300	0.02 $_7$	
310	0.10 $_3$	
320	0.24 $_2$	0.02 $_8$
330	0.39 $_7$	0.09 $_9$
340	0.55 $_9$	0.23 $_4$
350	0.70 $_1$	0.41 $_1$
360	0.81 $_1$	0.59 $_3$
370	0.88 $_9$	0.74 $_5$
380	0.92 $_5$	0.82 $_3$
390	0.95 $_1$	0.88 $_3$
400	0.96 $_7$	0.92 $_0$
420	0.98 $_2$	0.95 $_7$
440	0.99 $_0$	0.97 $_5$
460	0.99 $_2$	0.98 $_2$
480	0.99 $_7$	0.99 $_2$
500	0.99 $_8$	0.99 $_6$
550	0.99 $_8$	0.99 $_6$
600	0.99 $_8$	0.99 $_6$
650	0.99 $_8$	0.99 $_6$
700	0.99 $_8$	0.99 $_6$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_1$	0.97 $_8$
1500	0.98 $_7$	0.96 $_8$
2000	0.95 $_1$	0.88 $_3$

810410	nd 1.81000	νd 41.0	nF−nC 0.01976
K-VC89	ne 1.81469	νe 40.8	nF'−nC' 0.01999

屈折率 Refractive Indices		
nt	1014.0	1.78938
nA'	768.2	1.79755
nr	706.5	1.80080
nC	656.3	1.80410
nC'	643.9	1.80503
nD	589.3	1.80982
nd	587.6	1.81000
ne	546.1	1.81469
nF	486.1	1.82386
nF'	480.0	1.82502
ng	435.8	1.83507
nG'	434.1	
nh	404.7	1.84464
ni	365.0	1.86153

分散式の常数 Constans of Dispersion Formula	
A0	3.1757010
A1	−8.5956442 ×10 $^{-3}$
A2	3.6672615 ×10 $^{-2}$
A3	−8.8322460 ×10 $^{-4}$
A4	2.0716010 ×10 $^{-4}$
A5	−7.0406978 ×10 $^{-6}$

異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0075
Δθ C,A'	0.0049
Δθ g,d	−0.0116
Δθ g,F	−0.0084
Δθ i,g	−0.0334

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01472	0.00655	0.00590	0.01059
θ C,t	θ C,A'	θ d,C	θ e,C
0.745	0.331	0.299	0.536
ng−nd	ng−nF	nh−ng	ni−ng
0.02507	0.01121	0.00957	0.02646
θ g,d	θ g,F	θ h,g	θ i,g
1.269	0.567	0.484	1.339
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01565	0.00966	0.01033	0.03651
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.783	0.483	0.517	1.826

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 644 (6)	転移点 Tg (℃) Transformation Point 528
ビッカース硬さ Hv Vickers Hardness 654	屈伏点 At (℃) Yielding Point 559
磨耗度 Ha Abrasion 78	線膨張係数 α ×10^{-7} Thermal Expansion (100-300℃) 83
ヤング率 E (10^{8}N/m^2) Young's Modulus 1124	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 436	
ポアソン比 σ Poisson Ratio 0.290	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 40/34
耐酸性(粉末法) RA Acid Resistance 3	比重 S.g Specific Gravity 4.75
耐候性(表面法) DW Weather Resistance 1	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330	0.03 $_1$	
340	0.07 $_6$	0.00 $_2$
350	0.32 $_6$	0.06 $_1$
360	0.58 $_4$	0.26 $_0$
370	0.75 $_4$	0.49 $_3$
380	0.85 $_4$	0.67 $_5$
390	0.91 $_0$	0.78 $_9$
400	0.94 $_3$	0.86 $_2$
420	0.97 $_2$	0.93 $_1$
440	0.98 $_1$	0.95 $_3$
460	0.98 $_5$	0.96 $_3$
480	0.99 $_0$	0.97 $_6$
500	0.99 $_5$	0.98 $_7$
550	0.99 $_6$	0.99 $_2$
600	0.99 $_6$	0.99 $_4$
650	0.99 $_6$	0.99 $_4$
700	0.99 $_8$	0.99 $_5$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_8$	0.99 $_6$
2000	0.97 $_3$	0.93 $_3$

714389	nd 1.71430	νd 38.9	nF−nC 0.01838
K−ZnSF8	ne 1.71866	νe 38.6	nF'−nC' 0.01860

屈折率 Refractive Indices		
nt	1014.0	1.69523
nA'	768.2	1.70285
nr	706.5	1.70583
nC	656.3	1.70886
nC'	643.9	1.70972
nD	589.3	1.71414
nd	587.6	1.71430
ne	546.1	1.71866
nF	486.1	1.72724
nF'	480.0	1.72832
ng	435.8	1.73780
nG'	434.1	
nh	404.7	1.74687
ni	365.0	1.76313

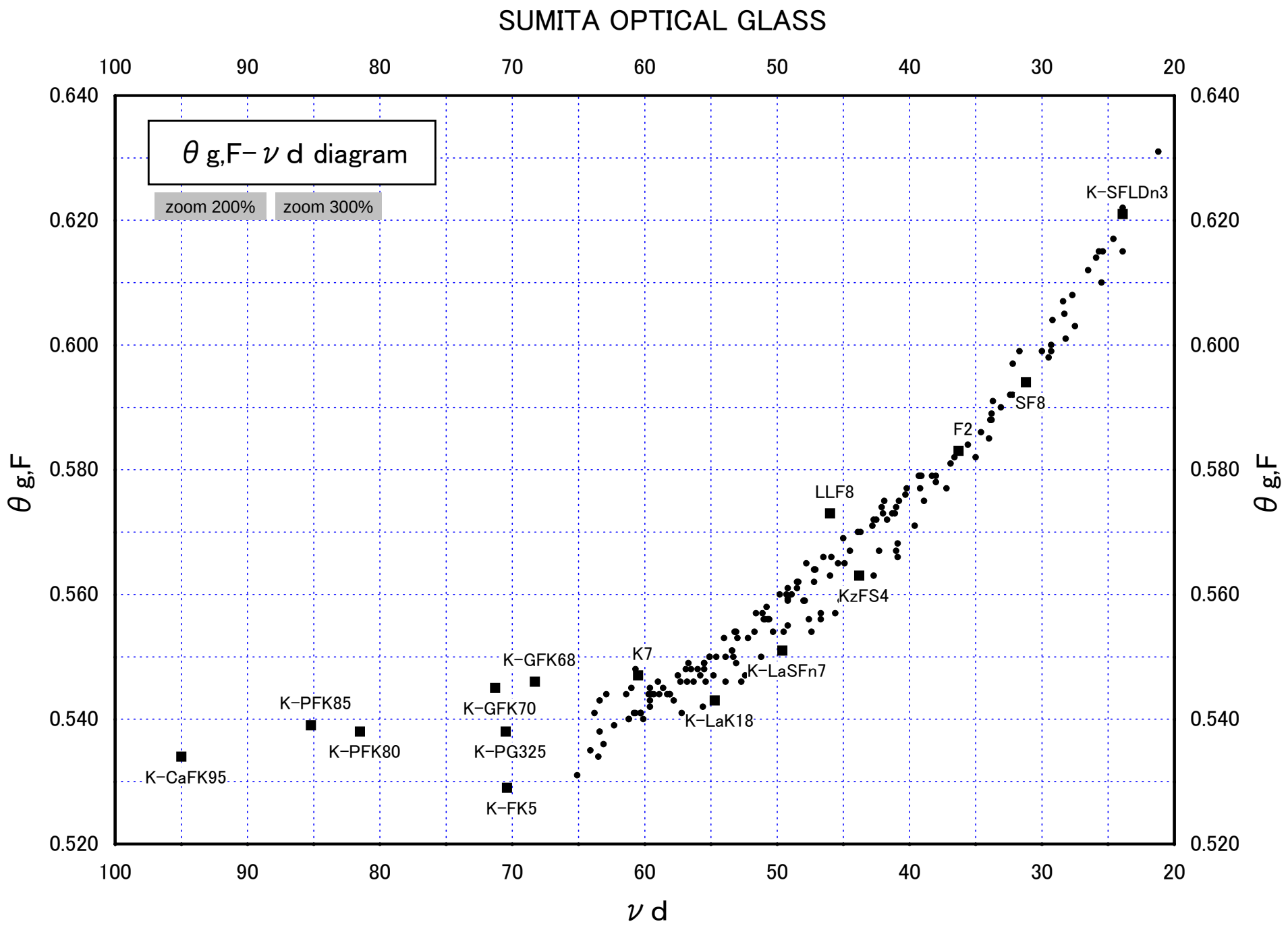
分散式の常数 Constans of Dispersion Formula	
A0	2.8605099
A1	−1.2462988 ×10 $^{-2}$
A2	2.5965803 ×10 $^{-2}$
A3	9.2523927 ×10 $^{-4}$
A4	−2.8185401 ×10 $^{-5}$
A5	4.6279720 ×10 $^{-6}$

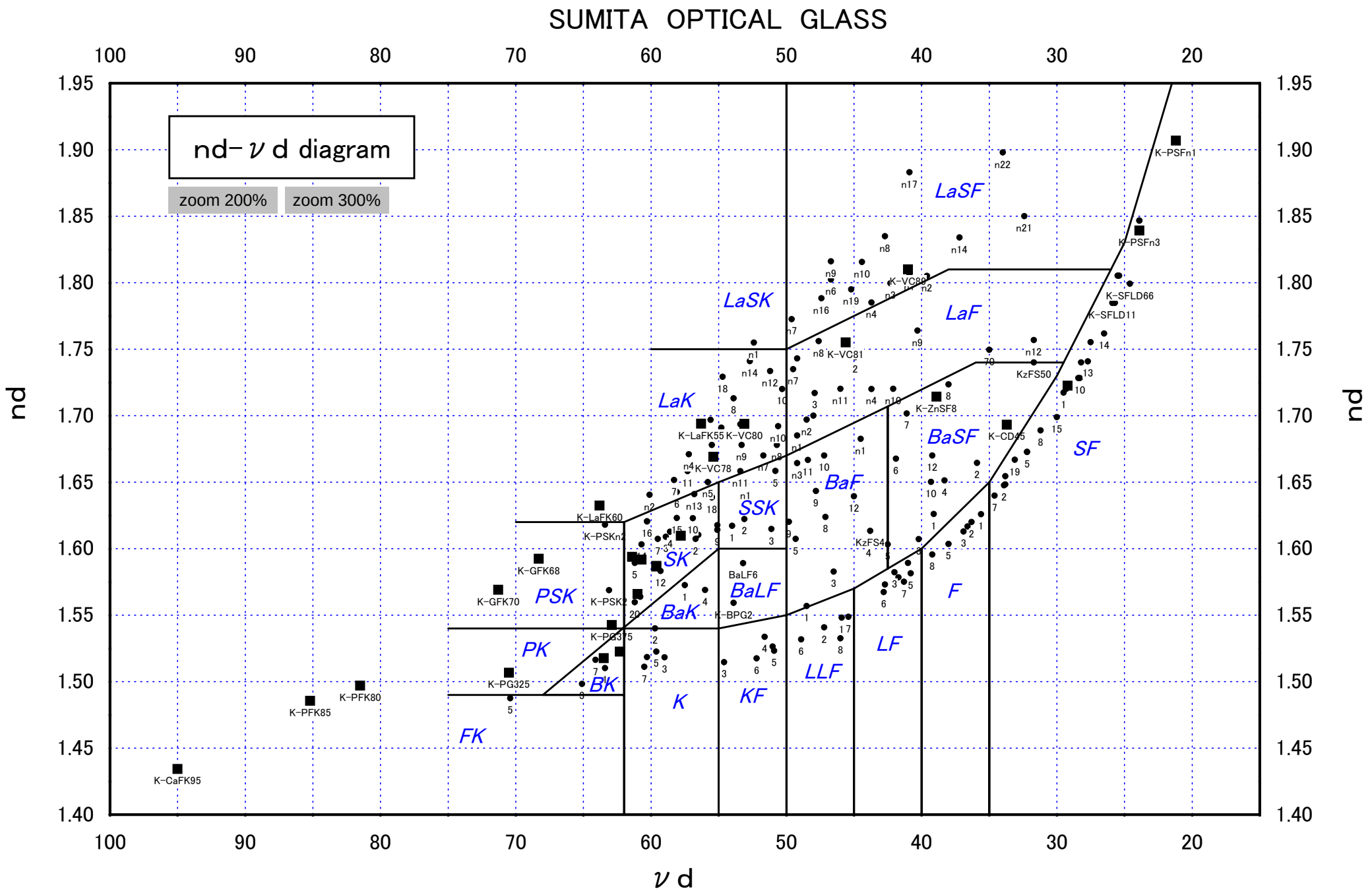
異常分散性 Deviation of Relative Partial Dispersions	
Δθ C,t	0.0141
Δθ C,A'	0.0029
Δθ g,d	−0.0060
Δθ g,F	−0.0044
Δθ i,g	−0.0109

部分分散及び部分分散比 Partial Dispersions and Relative Partial Dispersions			
nC−nt	nC−nA'	nd−nC	ne−nC
0.01363	0.00601	0.00544	0.00980
θ C,t	θ C,A'	θ d,C	θ e,C
0.742	0.327	0.296	0.533
ng−nd	ng−nF	nh−ng	ni−ng
0.02350	0.01056	0.00907	0.02533
θ g,d	θ g,F	θ h,g	θ i,g
1.279	0.575	0.493	1.378
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01449	0.00894	0.00966	0.03481
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.779	0.481	0.519	1.872

機械的性質 Mechanical Properties	熱的性質 Thermal Properties
ヌープ硬さ Hk Knoop Hardness 512 (5)	転移点 Tg (℃) Transformation Point 518
ビッカース硬さ Hv Vickers Hardness 548	屈伏点 At (℃) Yielding Point 546
磨耗度 Ha Abrasion 100	線膨張係数 α ×10^{-7} Thermal Expansion (100−300℃) 60
ヤング率 E (10^{8}N/m^2) Young's Modulus 873	備考 Remark s
剛性率 G (10^{8}N/m^2) Modulus of Rigidity 333	
ポアソン比 σ Poisson Ratio 0.311	その他 Other Properties
化学的性質 Chemical Properties	泡 B Bubbles
耐水性(粉末法) RW Water Resistance 1	着色度 C Color Degree 39/34
耐酸性(粉末法) RA Acid Resistance 4	比重 S.g Specific Gravity 3.72
耐候性(表面法) DW Weather Resistance 2	脈理 S Striae

内部透過率 τ Internal Transmittance		
λ nm	10mm	25mm
270		
280		
290		
300		
310		
320		
330		
340	0.10 $_7$	
350	0.44 $_7$	0.13 $_4$
360	0.69 $_4$	0.40 $_2$
370	0.83 $_5$	0.63 $_8$
380	0.90 $_5$	0.78 $_0$
390	0.94 $_0$	0.85 $_7$
400	0.96 $_1$	0.90 $_6$
420	0.97 $_5$	0.94 $_0$
440	0.98 $_1$	0.95 $_4$
460	0.98 $_5$	0.96 $_4$
480	0.98 $_8$	0.97 $_1$
500	0.98 $_8$	0.97 $_1$
550	0.99 $_2$	0.98 $_2$
600	0.99 $_5$	0.98 $_9$
650	0.99 $_7$	0.99 $_2$
700	0.99 $_7$	0.99 $_2$
800	0.99 $_8$	0.99 $_6$
1060	0.99 $_8$	0.99 $_6$
1500	0.99 $_8$	0.99 $_6$
2000	0.96 $_3$	0.91 $_0$


SUMITA OPTICAL GLASS
θ g,F－ν d diagram
zoom 200%
zoom 300%
K-SFLDn3
SF8
F2
LLF8
KzFS4
K-LaSFn7
K7
K-LaK18
K-GFK68
K-GFK70
K-PG325
K-FK5
K-PFK85
K-PFK80
K-CaFK95
θ g,F
ν d
100
90
80
70
60
50
40
30
20
0.640
0.620
0.600
0.580
0.560
0.540
0.520


SUMITA OPTICAL GLASS
nd- ν d diagram
zoom 200%
zoom 300%
nd
ν d
LaSF
LaSK
LaF
LaK
BaSF
BaF
SSK
SF
SK
PSK
BaLF
BaK
F
PK
LF
LLF
BK
K
KF
FK
K-CaFK95
K-PFK85
K-PFK80
K-PG325
K-GFK70
K-GFK68
K-PSK2
K-PSKn2
K-PG375
K-LaFK60
K-LaFK55
K-VC80
K-VC78
K-VC89
K-VC81
K-ZnSF8
K-CD45
KzFS50
KzFS4
K-BPG2
BaLF6
K-PSFn1
K-PSFn3
K-SFLD66
K-SFLD11