※レンズ成形難易度が特に高い硝材です。
Moldability of this glass material is classified as "especially difficult".

002206 K-PSFn2	nd	2.00170	νd	20.6	nF−nC	0.04852
	ne	2.01310	νe	20.5	nF'−nC'	0.04947

屈 折 率 Refractive Indices

n1548	1548.1	1.94154
n1309	1308.5	1.94708
nt	1014.0	1.95709
nA'	768.2	1.97365
nr	706.5	1.98065
nC	656.3	1.98800
nC'	643.8	1.99011
nD	589.3	2.00129
nd	587.6	2.00170
ne	546.1	2.01310
nF	486.1	2.03652
nF'	480.0	2.03958
ng	435.8	2.06726
nh	404.7	2.09566
ni	365.0	

分散式の常数 Constants of Dispersion Formula

A0	3.7699503
A1	$-1.3004151 \times 10^{-2}$
A2	7.2310519×10^{-2}
A3	3.5123072×10^{-3}
A4	$-1.0361594 \times 10^{-5}$
A5	3.8615781×10^{-5}

部分分散および部分分散比 Partial Dispersions and Relative Partial Dispersions

nC−nt	nC−nA'	nd−nC	ne−nC
0.03091	0.01435	0.01370	0.02510
θC,t	θC,A'	θd,C	θe,C
0.637	0.296	0.282	0.517
ng−nd	ng−nF	nh−ng	ni−ng
0.06556	0.03074	0.02840	
θg,d	θg,F(Δ)	θh,g	θi,g
1.351	0.634 (0.0241)	0.585	
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.03302	0.02299	0.02648	
θ'C',t	θ'e,C'	θ'F',e	θ'i,F'
0.667	0.465	0.535	

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	480
ビッカース硬さ Hv Vickers Hardness	426	屈伏点 At (℃) Yielding Point	514
摩耗度 Ha Abrasion	361	線膨張係数 α (×10⁻⁷℃⁻¹) Thermal Expansion	
ヤング率 E (×10⁸N·m⁻²) Young's Modulus	747	(−30〜+70℃)	73
		(+100〜+300℃)	92
剛性率 G (×10⁸N·m⁻²) Modulus of Rigidity	299	熱伝導率 λ (W·m⁻¹·K⁻¹) Thermal Conductivity	0.664
ポアソン比 σ Poisson Ratio	0.250	比熱 Cp (J·kg⁻¹·K⁻¹) Specific Heat	404
化学的性質 Chemical Properties		**その他 Other Properties**	
耐水性(粉末法) RW Water Resistance	1	泡 B Bubbles	
耐酸性(粉末法) RA Acid Resistance	1	着色度 C Coloration	(50)/40
耐久性(表面法) DW Chemical Durability	1	比重 S.g Specific Gravity	5.48
備考 Remarks	Solarization	生産頻度 PF Production frequency	C

内部透過率 τ Internal Transmittance

λ(nm)	3mm	10mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370		
380	0.131	
390	0.338	0.027
400	0.534	0.123
420	0.768	0.415
440	0.870	0.629
460	0.915	0.744
480	0.941	0.817
500	0.959	0.870
550	0.984	0.948
600	0.986	0.954
650	0.985	0.951
700	0.990	0.967
800	0.996	0.989
1060	0.998	0.994
1500	0.998	0.993
2000	0.994	0.981

dn/dTの分散常数 Constants of Dispersion dn/dT abs.

D0	8.11×10^{-6}
D1	2.15×10^{-8}
D2	-1.06×10^{-10}
E0	2.16×10^{-6}
E1	2.01×10^{-9}
λTK (μm)	0.291

屈折率の温度係数 Temperature Coefficients of Refractive Index

	(dn/dT)rel. (×10⁻⁶℃⁻¹)			(dn/dT)abs. (×10⁻⁶℃⁻¹)		
(℃)	1548.1	d	g	1548.1	d	g
−40/−20	6.9	12.2	21.7	4.3	9.5	18.8
0/+20	8.0	13.9	24.1	6.1	11.9	22.0
+40/+60	8.7	15.0	26.0	7.2	13.4	24.4

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