768500 K-LaFK50L						
	nd	1.76820	ν d	50.0	nF−nC	0.01537
	ne	1.77186	ν e	49.7	nF'−nC'	0.01553

屈 折 率 Refractive Indices

n1548	1548.1	1.74312
n1309	1308.5	1.74664
nt	1014.0	1.75173
nA'	768.2	1.75842
nr	706.5	1.76099
nC	656.3	1.76358
nC'	643.8	1.76431
nD	589.3	1.76806
nd	587.6	1.76820
ne	546.1	1.77186
nF	486.1	1.77895
nF'	480.0	1.77984
ng	435.8	1.78747
nh	404.7	1.79461
ni	365.0	1.80692

分散式の常数 Constants of Dispersion Formula

A0	3.0573838
A1	$-1.2055219 \times 10^{-2}$
A2	2.3638339×10^{-2}
A3	6.2476367×10^{-4}
A4	$-2.2244211 \times 10^{-5}$
A5	1.8829997×10^{-6}

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
0.01185	0.00516	0.00462	0.00828
θ C,t	θ C,A'	θ d,C	θ e,C
0.771	0.336	0.301	0.539
ng−nd	ng−nF	nh−ng	ni−ng
0.01927	0.00852	0.00714	0.01945
θ g,d	θ g,F(Δ)	θ h,g	θ i,g
1.254	0.554 (−0.0061)	0.465	1.265
nC'−nt	ne−nC'	nF'−ne	ni−nF'
0.01258	0.00755	0.00798	0.02708
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.810	0.486	0.514	1.744

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	625 (6)
ビッカース硬さ Hv Vickers Hardness	633
摩耗度 Ha Abrasion	90
ヤング率 E ($\times 10^8$ N·m^{-2}) Young's Modulus	1153
剛性率 G ($\times 10^8$ N·m^{-2}) Modulus of Rigidity	440
ポアソン比 σ Poisson Ratio	0.310

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	528
屈伏点 At (℃) Yielding Point	566
線膨張係数 α ($\times 10^{-7}$℃$^{-1}$) Thermal Expansion	
(−30〜+70℃)	67
(+100〜+300℃)	93
熱伝導率 λ (W·m^{-1}·K^{-1}) Thermal Conductivity	
比熱 Cp (J·kg^{-1}·K^{-1}) Specific Heat	

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
耐久性(表面法) DW Chemical Durability	1
備考 Remarks	

その他 Other Properties

泡 B Bubbles	
着色度 C Coloration	37/28
比重 S.g Specific Gravity	5.15
生産頻度 PF Production frequency	

内部透過率 τ Internal Transmittance

λ(nm)	3mm	10mm
270	0.245	
280	0.440	
290	0.570	0.155
300	0.646	0.235
310	0.647	0.236
320	0.807	0.491
330	0.872	0.634
340	0.920	0.757
350	0.955	0.856
360	0.975	0.919
370	0.987	0.958
380	0.994	0.980
390	0.997	0.991
400	0.999	0.996
420	0.999	0.999
440	0.999	0.999
460	0.999	0.999
480	0.999	0.999
500	0.999	0.999
550	0.999	0.999
600	0.999	0.999
650	0.999	0.999
700	0.999	0.999
800	0.999	0.999
1060	0.999	0.999
1500	0.999	0.999
2000	0.991	0.972

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

D0	-2.04×10^{-7}
D1	8.68×10^{-9}
D2	-2.18×10^{-10}
E0	6.17×10^{-7}
E1	8.51×10^{-10}
λ_{TK} (μm)	0.212

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

	(dn/dT)rel. ($\times 10^{-6}$℃$^{-1}$)			(dn/dT)abs. ($\times 10^{-6}$℃$^{-1}$)		
(℃)	1548.1	d	g	1548.1	d	g
−40/−20	0.9	1.8	3.1	−1.5	−0.6	0.6
0/+20	1.6	2.7	4.1	−0.1	0.9	2.3
+40/+60	1.3	2.5	4.1	0.0	1.2	2.7

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※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".

Optical Glass for Precision Molding

K-PSFn202P

022214 K-PSFn202P	nd	2.02160	νd	21.4	nF-nC	0.04781
	ne	2.03282	νe	21.2	nF'-nC'	0.04875

屈 折 率 Refractive Indices

n1548	1548.1	1.96141
n1309	1308.5	1.96726
nt	1014.0	1.97749
nA'	768.2	1.99391
nr	706.5	2.00085
nC	656.3	2.00810
nC'	643.8	2.01019
nD	589.3	2.02119
nd	587.6	2.02160
ne	546.1	2.03282
nF	486.1	2.05591
nF'	480.0	2.05894
ng	435.8	2.08632
nh	404.7	
ni	365.0	

分散式の常数 Constants of Dispersion Formula

A0	3.8532819
A1	$-1.5293212 \times 10^{-2}$
A2	7.1726623×10^{-2}
A3	3.2293376×10^{-3}
A4	7.1248443×10^{-5}
A5	3.2355356×10^{-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
0.03061	0.01419	0.01350	0.02472
θ C,t	θ C,A'	θ d,C	θ e,C
0.640	0.297	0.282	0.517
ng-nd	ng-nF	nh-ng	ni-ng
0.06472	0.03041		
θ g,d	θ g,F(Δ)	θ h,g	θ i,g
1.354	0.636 (0.0278)		
nC'-nt	ne-nC'	nF'-ne	ni-nF'
0.03270	0.02263	0.02612	
θ 'C',t	θ 'e,C'	θ 'F',e	θ 'i,F'
0.671	0.464	0.536	

機械的性質 Mechanical Properties

ヌープ硬さ Hk Knoop Hardness	512 (5)
ビッカース硬さ Hv Vickers Hardness	550
摩耗度 Ha Abrasion	190
ヤング率 E ($\times 10^8$ N·m^{-2}) Young's Modulus	893
剛性率 G ($\times 10^8$ N·m^{-2}) Modulus of Rigidity	350
ポアソン比 σ Poisson Ratio	0.275

熱的性質 Thermal Properties

転移点 Tg (℃) Transformation Point	457
屈伏点 At (℃) Yielding Point	487
線膨張係数 α ($\times 10^{-7}$℃$^{-1}$) Thermal Expansion	
(-30～+70℃)	64
(+100～+300℃)	86
熱伝導率 λ (W·m^{-1}·K^{-1}) Thermal Conductivity	
比熱 Cp (J·kg^{-1}·K^{-1}) Specific Heat	

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
耐久性(表面法) DW Chemical Durability	1
備考 Remarks	

その他 Other Properties

泡 B Bubbles	
着色度 C Coloration	(47)/40
比重 S.g Specific Gravity	6.25
生産頻度 PF Production frequency	

内部透過率 τ Internal Transmittance

λ(nm)	3mm	10mm
270		
280		
290		
300		
310		
320		
330		
340		
350		
360		
370		
380		
390	0.143	
400	0.420	0.055
420	0.821	0.518
440	0.927	0.776
460	0.960	0.874
480	0.977	0.927
500	0.987	0.958
550	0.997	0.990
600	0.999	0.995
650	0.999	0.996
700	0.999	0.998
800	0.999	0.998
1060	0.999	0.999
1500	0.999	0.996
2000	0.988	0.962

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

D0	1.39×10^{-5}
D1	2.74×10^{-8}
D2	-4.45×10^{-10}
E0	2.51×10^{-6}
E1	1.83×10^{-9}
λTK (μm)	0.300

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

	(dn/dT)rel. ($\times 10^{-6}$℃$^{-1}$)			(dn/dT)abs. ($\times 10^{-6}$℃$^{-1}$)		
(℃)	1548.1	d	g	1548.1	d	g
-40/-20	9.0	15.7	27.9	6.4	12.9	25.0
0/+20	12.3	19.5	32.6	10.4	17.5	30.5
+40/+60	12.7	20.3	34.2	11.2	18.8	32.6

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