

SF57
847238.551

$n_d = 1.84666$	$v_d = 23.83$	$n_F - n_C = 0.035536$
$n_e = 1.85504$	$v_e = 23.64$	$n_F' - n_C' = 0.036166$

Refractive Indices		
	λ [nm]	
$n_{2325.4}$	2325.4	1.79026
$n_{1970.1}$	1970.1	1.79539
$n_{1529.6}$	1529.6	1.80187
$n_{1060.0}$	1060.0	1.81185
n_t	1014.0	1.81335
n_s	852.1	1.82038
n_f	706.5	1.83102
n_C	656.3	1.83650
$n_{C'}$	643.8	1.83808
$n_{632.8}$	632.8	1.83957
n_D	589.3	1.84636
n_d	587.6	1.84666
n_e	546.1	1.85504
n_F	486.1	1.87204
$n_{F'}$	480.0	1.87425
n_g	435.8	1.89393
n_h	404.7	1.91366
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula	
B_1	1.81651371
B_2	0.428893641
B_3	1.071862780
C_1	0.01437041980
C_2	0.0592801172
C_3	121.4199420

Constants of Formula for dn/dT	
D_0	7.26E-06
D_1	1.88E-08
D_2	-5.14E-11
E_0	1.96E-06
E_1	1.79E-09
λ_{TK} [μm]	0.276

Temperature Coefficients of the Refractive Index						
[°C]	$\Delta n_{rel}/\Delta T$ [$10^{-6}/K$]			$\Delta n_{abs}/\Delta T$ [$10^{-6}/K$]		
	1060.0	e	g	1060.0	e	g
-40/-20	6.6	11.1	16.7	4.2	8.6	14.1
+20/+40	7.6	12.5	18.9	6.0	10.9	17.2
+60/+80	8.0	13.4	20.1	6.8	12.1	18.8

Internal Transmittance τ_i		
λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.890	0.750
2325	0.910	0.790
1970	0.971	0.930
1530	0.996	0.991
1060	0.999	0.997
700	0.998	0.996
660	0.998	0.994
620	0.998	0.994
580	0.998	0.994
546	0.998	0.994
500	0.994	0.986
460	0.987	0.968
436	0.971	0.930
420	0.940	0.860
405	0.880	0.730
400	0.850	0.660
390	0.730	0.450
380	0.520	0.200
370	0.160	0.010
365	0.040	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code	
λ_{80} / λ_5	40/37*

Remarks
lead containing glass type suitable for precision molding

Relative Partial Dispersion	
$P_{s,t}$	0.1976
$P_{C,s}$	0.4539
$P_{d,C}$	0.2859
$P_{e,d}$	0.2356
$P_{g,F}$	0.6160
$P_{i,h}$	
$P'_{s,t}$	0.1942
$P'_{C,s}$	0.4895
$P'_{d,C'}$	0.2373
$P'_{e,d}$	0.2315
$P'_{g,F'}$	0.5443
$P'_{i,h}$	

Deviation of Relative Partial Dispersion ΔP from the normal line	
$\Delta P_{C,t}$	-0.0065
$\Delta P_{C,s}$	-0.0046
$\Delta P_{F,e}$	0.0026
$\Delta P_{g,F}$	0.0123
$\Delta P_{i,g}$	

Other Properties	
$\alpha_{-30/+70^\circ\text{C}}$ [$10^{-6}/K$]	8.3
$\alpha_{+20/+300^\circ\text{C}}$ [$10^{-6}/K$]	9.2
T_g [°C]	414
T_{10}^{13} [°C]	414
$T_{10}^{7.6}$ [°C]	507
c_p [J/(g·K)]	0.360
λ [W/(m·K)]	0.620
AT [°C]	449
ρ [g/cm ³]	5.51
E [10^3 N/mm ²]	54
μ	0.248
K [10^{-6} mm ² /N]	0.02
HK _{0.1/20}	350
HG	1
Abrasion Aa	344
CR	2
FR	5
SR	52.3
AR	2.3
PR	4.3
SR-J	6
WR-J	1