

**SFL57**  
**847236.355**

$n_d = 1.84666$	$v_d = 23.62$	$n_F - n_C = 0.035841$
$n_e = 1.85510$	$v_e = 23.43$	$n_{F'} - n_{C'} = 0.036489$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.78487
$n_{1970.1}$	1970.1	1.79171
$n_{1529.6}$	1529.6	1.79989
$n_{1060.0}$	1060.0	1.81117
$n_t$	1014.0	1.81276
$n_s$	852.1	1.82007
$n_r$	706.5	1.83089
$n_C$	656.3	1.83643
$n_{C'}$	643.8	1.83802
$n_{632.8}$	632.8	1.83952
$n_D$	589.3	1.84635
$n_d$	587.6	1.84666
$n_e$	546.1	1.85510
$n_F$	486.1	1.87227
$n_{F'}$	480.0	1.87451
$n_g$	435.8	1.89456
$n_h$	404.7	1.91488
$n_i$	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	

Internal Transmittance $\tau_i$		
$\lambda$ [nm]	$\tau_i$ (10mm)	$\tau_i$ (25mm)
2500	0.882	0.730
2325	0.910	0.790
1970	0.984	0.960
1530	0.996	0.990
1060	0.996	0.991
700	0.990	0.976
660	0.987	0.969
620	0.988	0.971
580	0.988	0.971
546	0.982	0.955
500	0.954	0.890
460	0.915	0.800
436	0.852	0.670
420	0.770	0.520
405	0.609	0.290
400	0.525	0.200
390	0.260	0.030
380	0.050	
370		
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2038
$P_{C,s}$	0.4566
$P_{d,C}$	0.2855
$P_{e,d}$	0.2353
$P_{g,F}$	0.6218
$P_{i,h}$	
$P'_{s,t}$	0.2002
$P'_{C',s}$	0.4920
$P'_{d,C'}$	0.2369
$P'_{e,d}$	0.2311
$P'_{g,F'}$	0.5495
$P'_{i,h}$	

Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"	
$\Delta P_{C,t}$	0.0034
$\Delta P_{C,s}$	-0.0014
$\Delta P_{F,e}$	0.0033
$\Delta P_{g,F}$	0.0177
$\Delta P_{i,g}$	

Constants of Dispersion Formula	
$B_1$	1.88742326
$B_2$	0.360534025
$B_3$	2.26189313
$C_1$	0.0145939341
$C_2$	0.0648198946
$C_3$	176.062211

Constants of Dispersion $dn/dT$	
$D_0$	$-3.63 \cdot 10^{-6}$
$D_1$	$8.61 \cdot 10^{-9}$
$D_2$	$-9.98 \cdot 10^{-12}$
$E_0$	$1.10 \cdot 10^{-6}$
$E_1$	$1.69 \cdot 10^{-9}$
$\lambda_{TK} [\mu m]$	0.293

Color Code	
$\lambda_{80}/\lambda_5$	44/38*
(*= $\lambda_{70}/\lambda_5$ )	

Remarks
inquiry glass, lead containing

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	8.7
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	10.0
$T_g [^\circ C]$	598
$T_{10}^{13.0} [^\circ C]$	0
$T_{10}^{7.6} [^\circ C]$	700
$c_p [J/(g \cdot K)]$	0.670
$\lambda [W/(m \cdot K)]$	0.997
$\rho [g/cm^3]$	3.55
$E [10^3 N/mm^2]$	97
$\mu$	0.261
$K [10^{-6} mm^2/N]$	2.73
$HK_{0.1/20}$	580
$HG$	3
$CR$	1
$FR$	0
$SR$	1.3
$AR$	1
$PR$	1.3

Temperature Coefficients of Refractive Index						
[ $^\circ C$ ]	$\Delta n_{rel}/\Delta T [10^{-6}/K]$			$\Delta n_{abs}/\Delta T [10^{-6}/K]$		
	1060.0	e	g	1060.0	e	g
-40/ -20	0.1	2.4	5.6	-2.3	-0.1	3.0
+20/ +40	0.1	2.9	6.8	-1.5	1.2	5.1
+60/ +80	0.2	3.3	7.7	-1.0	2.1	6.4