

**SF2**  
**648339.386**

$n_d = 1.64769$	$v_d = 33.85$	$n_F - n_C = 0.019135$
$n_e = 1.65222$	$v_e = 33.60$	$n_{F'} - n_{C'} = 0.019412$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.61003
$n_{1970.1}$	1970.1	1.61494
$n_{1529.6}$	1529.6	1.62055
$n_{1060.0}$	1060.0	1.62766
$n_t$	1014.0	1.62861
$n_s$	852.1	1.63289
$n_r$	706.5	1.63902
$n_C$	656.3	1.64210
$n_{C'}$	643.8	1.64297
$n_{632.8}$	632.8	1.64379
$n_D$	589.3	1.64752
$n_d$	587.6	1.64769
$n_e$	546.1	1.65222
$n_F$	486.1	1.66123
$n_{F'}$	480.0	1.66238
$n_g$	435.8	1.67249
$n_h$	404.7	1.68233
$n_i$	365.0	1.70027
$n_{334.1}$	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	0.826	0.620
2325	0.872	0.710
1970	0.950	0.880
1530	0.994	0.985
1060	0.998	0.996
700	0.998	0.996
660	0.998	0.994
620	0.998	0.995
580	0.998	0.995
546	0.998	0.995
500	0.997	0.993
460	0.995	0.988
436	0.993	0.982
420	0.990	0.975
405	0.985	0.962
400	0.981	0.954
390	0.967	0.920
380	0.946	0.870
370	0.910	0.790
365	0.877	0.720
350	0.672	0.370
334	0.110	
320		
310		
300		
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2233
$P_{C,s}$	0.4813
$P_{d,C}$	0.2923
$P_{e,d}$	0.2367
$P_{g,F}$	0.5886
$P_{i,h}$	0.9376
$P'_{s,t}$	0.2201
$P'_{C',s}$	0.5196
$P'_{d,C'}$	0.2430
$P'_{e,d}$	0.2334
$P'_{g,F'}$	0.5209
$P'_{i,h}$	0.9242

### Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"

$\Delta P_{C,t}$	-0.0009
$\Delta P_{C,s}$	-0.0005
$\Delta P_{F,e}$	0.0004
$\Delta P_{g,F}$	0.0017
$\Delta P_{i,g}$	0.0112

Constants of Dispersion Formula	
$B_1$	1.40301821
$B_2$	0.231767504
$B_3$	0.939056586
$C_1$	0.0105795466
$C_2$	0.0493226978
$C_3$	112.405955

Constants of Dispersion $dn/dT$	
$D_0$	$1.10 \cdot 10^{-6}$
$D_1$	$1.75 \cdot 10^{-8}$
$D_2$	$-1.29 \cdot 10^{-11}$
$E_0$	$1.08 \cdot 10^{-6}$
$E_1$	$1.03 \cdot 10^{-9}$
$\lambda_{TK} [\mu m]$	0.249

Color Code	
$\lambda_{80}/\lambda_5$	37/33
(* = $\lambda_{70}/\lambda_5$ )	

Remarks	
lead containing glass type, step 0.5 available	

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	8.4
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	9.2
$T_g [^\circ C]$	441
$T_{10}^{13.0} [^\circ C]$	428
$T_{10}^{7.6} [^\circ C]$	600
$c_p [J/(g \cdot K)]$	0.498
$\lambda [W/(m \cdot K)]$	0.735
$\rho [g/cm^3]$	3.86
$E [10^3 N/mm^2]$	55
$\mu$	0.227
$K [10^{-6} mm^2/N]$	2.62
$HK_{0.1/20}$	410
$HG$	2
$CR$	1
$FR$	0
$SR$	2
$AR$	2.3
$PR$	2

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	2.3	4.0	6.0	0.1	1.8	3.7
+20/ +40	2.7	4.6	6.9	1.3	3.2	5.4
+60/ +80	3.1	5.2	7.6	2.0	4.1	6.4