

**SF1**  
**717295.446**

$n_d = 1.71736$	$v_d = 29.51$	$n_F - n_C = 0.024307$
$n_e = 1.72310$	$v_e = 29.29$	$n_{F'} - n_{C'} = 0.024687$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.67352
$n_{1970.1}$	1970.1	1.67855
$n_{1529.6}$	1529.6	1.68449
$n_{1060.0}$	1060.0	1.69258
$n_t$	1014.0	1.69371
$n_s$	852.1	1.69888
$n_r$	706.5	1.70647
$n_C$	656.3	1.71031
$n_{C'}$	643.8	1.71141
$n_{632.8}$	632.8	1.71245
$n_D$	589.3	1.71715
$n_d$	587.6	1.71736
$n_e$	546.1	1.72310
$n_F$	486.1	1.73462
$n_{F'}$	480.0	1.73610
$n_g$	435.8	1.74916
$n_h$	404.7	1.76201
$n_i$	365.0	1.78580
$n_{334.1}$	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	0.842	0.650
2325	0.882	0.730
1970	0.959	0.900
1530	0.994	0.985
1060	0.998	0.996
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.996
546	0.998	0.996
500	0.997	0.993
460	0.994	0.984
436	0.990	0.976
420	0.984	0.961
405	0.971	0.930
400	0.967	0.920
390	0.946	0.870
380	0.910	0.790
370	0.837	0.640
365	0.758	0.500
350	0.300	0.030
334		
320		
310		
300		
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2127
$P_{C,s}$	0.4705
$P_{d,C}$	0.2899
$P_{e,d}$	0.2364
$P_{g,F}$	0.5983
$P_{i,h}$	0.9791
$P'_{s,t}$	0.2094
$P'_{C,s}$	0.5078
$P'_{d,C'}$	0.2409
$P'_{e,d}$	0.2327
$P'_{g,F'}$	0.5292
$P'_{i,h}$	0.9640

Constants of Dispersion Formula	
$B_1$	1.55912923
$B_2$	0.284246288
$B_3$	0.968842926
$C_1$	0.0121481001
$C_2$	0.0534549042
$C_3$	112.174809

Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"	
$\Delta P_{C,t}$	-0.0018
$\Delta P_{C,s}$	-0.0012
$\Delta P_{F,e}$	0.0009
$\Delta P_{g,F}$	0.0042
$\Delta P_{i,g}$	0.0307

Constants of Dispersion $dn/dT$	
$D_0$	$4.84 \cdot 10^{-6}$
$D_1$	$1.70 \cdot 10^{-8}$
$D_2$	$-4.52 \cdot 10^{-11}$
$E_0$	$1.38 \cdot 10^{-6}$
$E_1$	$1.26 \cdot 10^{-9}$
$\lambda_{TK}$ [μm]	0.259

Color Code	
$\lambda_{80}/\lambda_5$	39/34
(*= $\lambda_{70}/\lambda_5$ )	

**Remarks**  
lead containing glass type

Other Properties	
$\alpha_{-30/+70^\circ C}$ [ $10^{-6}/K$ ]	8.1
$\alpha_{+20/+300^\circ C}$ [ $10^{-6}/K$ ]	8.8
$T_g$ [°C]	417
$T_{10}^{13.0}$ [°C]	415
$T_{10}^{7.6}$ [°C]	566
$c_p$ [J/(g·K)]	
$\lambda$ [W/(m·K)]	
$\rho$ [g/cm <sup>3</sup> ]	4.46
$E$ [ $10^3$ N/mm <sup>2</sup> ]	56
$\mu$	0.232
$K$ [ $10^{-6}$ mm <sup>2</sup> /N]	1.80
$HK_{0.1/20}$	390
<b>HG</b>	1
<b>B</b>	1
<b>CR</b>	2
<b>FR</b>	1
<b>SR</b>	3.2
<b>AR</b>	2.3
<b>PR</b>	3

Temperature Coefficients of 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	4.5	7.0	10.1	2.2	4.7	7.7
+20/ +40	5.0	7.9	11.3	3.6	6.4	9.8
+60/ +80	5.3	8.4	12.1	4.2	7.3	10.9