

**SF5**  
**673322.407**

$n_d = 1.67270$	$v_d = 32.21$	$n_F - n_C = 0.020885$
$n_e = 1.67764$	$v_e = 31.97$	$n_{F'} - n_{C'} = 0.021195$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.63289
$n_{1970.1}$	1970.1	1.63785
$n_{1529.6}$	1529.6	1.64359
$n_{1060.0}$	1060.0	1.65104
$n_t$	1014.0	1.65206
$n_s$	852.1	1.65664
$n_r$	706.5	1.66327
$n_C$	656.3	1.66661
$n_{C'}$	643.8	1.66756
$n_{632.8}$	632.8	1.66846
$n_D$	589.3	1.67252
$n_d$	587.6	1.67270
$n_e$	546.1	1.67764
$n_F$	486.1	1.68750
$n_{F'}$	480.0	1.68876
$n_g$	435.8	1.69986
$n_h$	404.7	1.71069
$n_i$	365.0	1.73056
$n_{334.1}$	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	
$B_1$	1.46141885
$B_2$	0.247713019
$B_3$	0.949995832
$C_1$	0.0111826126
$C_2$	0.0508594669
$C_3$	112.041888

Constants of Dispersion dn/dT	
$D_0$	$2.59 \cdot 10^{-6}$
$D_1$	$1.76 \cdot 10^{-8}$
$D_2$	$-2.03 \cdot 10^{-11}$
$E_0$	$1.17 \cdot 10^{-6}$
$E_1$	$1.09 \cdot 10^{-9}$
$\lambda_{TK} [\mu\text{m}]$	0.255

Temperature Coefficients of Refractive Index						
	$\Delta n_{rel} / \Delta T [10^{-6} / K]$			$\Delta n_{abs} / \Delta T [10^{-6} / K]$		
[°C]	1060.0	e	g	1060.0	e	g
-40/ -20	3.1	5.1	7.4	0.9	2.8	5.1
+20/ +40	3.5	5.8	8.4	2.1	4.4	6.9
+60/ +80	3.9	6.4	9.2	2.8	5.2	8.0

Internal Transmittance $\tau_i$		
$\lambda$ [nm]	$\tau_i$ (10mm)	$\tau_i$ (25mm)
2500	0.847	0.660
2325	0.887	0.740
1970	0.959	0.900
1530	0.995	0.987
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	0.995	0.988
436	0.993	0.982
420	0.989	0.973
405	0.983	0.959
400	0.980	0.950
390	0.967	0.920
380	0.950	0.880
370	0.915	0.800
365	0.882	0.730
350	0.626	0.310
334	0.200	
320		
310		
300		
290		
280		
270		
260		
250		

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

Remarks
lead containing glass type

Relative Partial Dispersion	
$P_{s,t}$	0.2194
$P_{C,s}$	0.4775
$P_{d,C}$	0.2915
$P_{e,d}$	0.2366
$P_{g,F}$	0.5919
$P_{i,h}$	0.9513
$P'_{s,t}$	0.2162
$P'_{C',s}$	0.5153
$P'_{d,C'}$	0.2423
$P'_{e,d}$	0.2331
$P'_{g,F'}$	0.5237
$P'_{i,h}$	0.9374

Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"	
$\Delta P_{C,t}$	-0.0010
$\Delta P_{C,s}$	-0.0005
$\Delta P_{F,e}$	0.0005
$\Delta P_{g,F}$	0.0023
$\Delta P_{i,g}$	0.0160

Other Properties	
$\alpha_{-30/+70^\circ\text{C}} [10^{-6}/\text{K}]$	8.2
$\alpha_{+20/+300^\circ\text{C}} [10^{-6}/\text{K}]$	9.0
$T_g [^\circ\text{C}]$	425
$T_{10}^{13.0} [^\circ\text{C}]$	421
$T_{10}^{7.6} [^\circ\text{C}]$	580
$c_p [\text{J}/(\text{g}\cdot\text{K})]$	0.470
$\lambda [\text{W}/(\text{m}\cdot\text{K})]$	0.690
$\rho [\text{g}/\text{cm}^3]$	4.07
$E [10^3 \text{N}/\text{mm}^2]$	56
$\mu$	0.233
$K [10^{-6} \text{mm}^2/\text{N}]$	2.28
$\text{HK}_{0.1/20}$	410
$\text{HG}$	2
$\text{CR}$	1
$\text{FR}$	1
$\text{SR}$	2
$\text{AR}$	2.3
$\text{PR}$	3