

## SF57HT 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		
	$\lambda$ [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
$n_r$	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	

Internal Transmittance $\tau_i$		
$\lambda$ [nm]	$\tau_i$ (10mm)	$\tau_i$ (25mm)
2500	0.911	0.792
2325	0.927	0.826
1970	0.979	0.948
1530	0.998	0.994
1060	0.999	0.999
700	0.999	0.997
660	0.999	0.997
620	0.999	0.997
580	0.999	0.997
546	0.998	0.996
500	0.996	0.990
460	0.990	0.976
436	0.981	0.954
420	0.964	0.912
405	0.919	0.810
400	0.896	0.760
390	0.787	0.550
380	0.577	0.252
370	0.230	0.026
365	0.080	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

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 Dispersions $\Delta P$ 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
$\Delta P_{i,g}$	

Constants of Dispersion Formula	
$B_1$	1.81651371
$B_2$	0.428893641
$B_3$	1.07186278
$C_1$	0.0143704198
$C_2$	0.0592801172
$C_3$	121.419942

Constants of Dispersion $dn/dT$	
$D_0$	$7.26 \cdot 10^{-6}$
$D_1$	$1.88 \cdot 10^{-8}$
$D_2$	$-5.14 \cdot 10^{-11}$
$E_0$	$1.96 \cdot 10^{-6}$
$E_1$	$1.79 \cdot 10^{-9}$
$\lambda_{TK} [\mu m]$	0.276

Color Code	
$\lambda_{80}/\lambda_5$	40/36*
(*= $\lambda_{70}/\lambda_5$ )	

Remarks
inquiry glass, lead containing

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	8.3
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	9.2
$T_g [^\circ C]$	414
$T_{10}^{13.0} [^\circ C]$	391
$T_{10}^{7.6} [^\circ C]$	519
$c_p [J/(g \cdot K)]$	0.360
$\lambda [W/(m \cdot K)]$	0.620
$\rho [g/cm^3]$	5.51
$E [10^3 N/mm^2]$	54
$\mu$	0.248
$K [10^{-6} mm^2/N]$	0.02
$HK_{0.1/20}$	350
$HG$	1
$CR$	2
$FR$	5
$SR$	52.3
$AR$	2.3
$PR$	4.3

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	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