

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		
	λ [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 τ_i		
λ [nm]	τ_i (10mm)	τ_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 ΔP 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	
λ_{80}/λ_5	40/36*
(*= λ_{70}/λ_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
μ	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