

**SF56A**  
**785261.492**

$n_d = 1.78470$	$v_d = 26.08$	$n_F - n_C = 0.030092$
$n_e = 1.79180$	$v_e = 25.87$	$n_{F'} - n_{C'} = 0.030603$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.73406
$n_{1970.1}$	1970.1	1.73925
$n_{1529.6}$	1529.6	1.74559
$n_{1060.0}$	1060.0	1.75473
$n_t$	1014.0	1.75606
$n_s$	852.1	1.76220
$n_r$	706.5	1.77136
$n_C$	656.3	1.77605
$n_{C'}$	643.8	1.77740
$n_{632.8}$	632.8	1.77866
$n_D$	589.3	1.78444
$n_d$	587.6	1.78470
$n_e$	546.1	1.79180
$n_F$	486.1	1.80615
$n_{F'}$	480.0	1.80800
$n_g$	435.8	1.82449
$n_h$	404.7	1.84092
$n_i$	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	0.867	0.700
2325	0.896	0.760
1970	0.967	0.920
1530	0.996	0.989
1060	0.999	0.997
700	0.998	0.995
660	0.997	0.993
620	0.998	0.994
580	0.998	0.994
546	0.998	0.994
500	0.996	0.989
460	0.990	0.974
436	0.980	0.950
420	0.959	0.900
405	0.896	0.760
400	0.857	0.680
390	0.700	0.410
380	0.398	0.100
370	0.120	0.010
365	0.040	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2040
$P_{C,s}$	0.4605
$P_{d,C}$	0.2874
$P_{e,d}$	0.2359
$P_{g,F}$	0.6098
$P_{i,h}$	
$P'_{s,t}$	0.2006
$P'_{C',s}$	0.4967
$P'_{d,C'}$	0.2387
$P'_{e,d}$	0.2319
$P'_{g,F'}$	0.5390
$P'_{i,h}$	

Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"	
$\Delta P_{C,t}$	-0.0042
$\Delta P_{C,s}$	-0.0032
$\Delta P_{F,e}$	0.0021
$\Delta P_{g,F}$	0.0098
$\Delta P_{i,g}$	

Constants of Dispersion Formula	
$B_1$	1.70579259
$B_2$	0.344223052
$B_3$	1.09601828
$C_1$	0.0133874699
$C_2$	0.0579561608
$C_3$	121.616024

Constants of Dispersion $dn/dT$	
$D_0$	$6.02 \cdot 10^{-6}$
$D_1$	$1.70 \cdot 10^{-8}$
$D_2$	$-2.61 \cdot 10^{-11}$
$E_0$	$1.63 \cdot 10^{-6}$
$E_1$	$1.59 \cdot 10^{-9}$
$\lambda_{TK} [\mu m]$	0.269

Color Code	
$\lambda_{80}/\lambda_5$	42/37
(* = $\lambda_{70}/\lambda_5$ )	

Remarks	
lead containing glass type	

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	7.9
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	8.8
$T_g [^\circ C]$	429
$T_{10}^{13.0} [^\circ C]$	426
$T_{10}^{7.6} [^\circ C]$	556
$c_p [J/(g \cdot K)]$	0.400
$\lambda [W/(m \cdot K)]$	0.690
$\rho [g/cm^3]$	4.92
$E [10^3 N/mm^2]$	57
$\mu$	0.239
$K [10^{-6} mm^2/N]$	1.10
$HK_{0.1/20}$	380
HG	1
CR	1
FR	1
SR	3.2
AR	2.2
PR	3.2

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	5.6	9.0	13.1	3.3	6.6	10.6
+20/ +40	6.2	10.0	14.7	4.7	8.5	13.1
+60/ +80	6.6	10.7	15.8	5.5	9.5	14.5