

**SF10**  
**728284.428**

$n_d = 1.72825$	$v_d = 28.41$	$n_F - n_C = 0.025633$
$n_e = 1.73430$	$v_e = 28.19$	$n_{F'} - n_{C'} = 0.026051$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.68218
$n_{1970.1}$	1970.1	1.68750
$n_{1529.6}$	1529.6	1.69378
$n_{1060.0}$	1060.0	1.70227
$n_t$	1014.0	1.70345
$n_s$	852.1	1.70887
$n_r$	706.5	1.71681
$n_C$	656.3	1.72085
$n_{C'}$	643.8	1.72200
$n_{632.8}$	632.8	1.72309
$n_D$	589.3	1.72803
$n_d$	587.6	1.72825
$n_e$	546.1	1.73430
$n_F$	486.1	1.74648
$n_{F'}$	480.0	1.74805
$n_g$	435.8	1.76198
$n_h$	404.7	1.77579
$n_i$	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	0.862	0.690
2325	0.896	0.760
1970	0.967	0.920
1530	0.995	0.987
1060	0.999	0.997
700	0.998	0.995
660	0.997	0.993
620	0.997	0.993
580	0.998	0.995
546	0.998	0.995
500	0.996	0.989
460	0.991	0.978
436	0.984	0.961
420	0.967	0.920
405	0.910	0.790
400	0.862	0.690
390	0.672	0.370
380	0.360	0.060
370	0.080	
365	0.020	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2111
$P_{C,s}$	0.4674
$P_{d,C}$	0.2888
$P_{e,d}$	0.2361
$P_{g,F}$	0.6046
$P_{i,h}$	
$P'_{s,t}$	0.2077
$P'_{C',s}$	0.5042
$P'_{d,C'}$	0.2399
$P'_{e,d}$	0.2323
$P'_{g,F'}$	0.5346
$P'_{i,h}$	

Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"	
$\Delta P_{C,t}$	-0.0012
$\Delta P_{C,s}$	-0.0017
$\Delta P_{F,e}$	0.0017
$\Delta P_{g,F}$	0.0085
$\Delta P_{i,g}$	

Constants of Dispersion Formula	
$B_1$	1.61625977
$B_2$	0.259229334
$B_3$	1.07762317
$C_1$	0.0127534559
$C_2$	0.0581983954
$C_3$	116.60768

Constants of Dispersion $dn/dT$	
$D_0$	$5.31 \cdot 10^{-6}$
$D_1$	$1.59 \cdot 10^{-8}$
$D_2$	$-4.07 \cdot 10^{-11}$
$E_0$	$1.28 \cdot 10^{-6}$
$E_1$	$1.32 \cdot 10^{-9}$
$\lambda_{TK} [\mu m]$	0.27

Color Code	
$\lambda_{80}/\lambda_5$	41/37
(* = $\lambda_{70}/\lambda_5$ )	

Remarks	
lead containing glass type	

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	7.5
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	8.4
$T_g [^\circ C]$	454
$T_{10}^{13.0} [^\circ C]$	445
$T_{10}^{7.6} [^\circ C]$	595
$c_p [J/(g \cdot K)]$	0.465
$\lambda [W/(m \cdot K)]$	0.741
$\rho [g/cm^3]$	4.28
$E [10^3 N/mm^2]$	64
$\mu$	0.232
$K [10^{-6} mm^2/N]$	1.95
$HK_{0.1/20}$	430
HG	1
CR	1
FR	0
SR	1
AR	1.2
PR	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	4.8	7.3	10.3	2.5	4.9	7.9
+20/ +40	5.3	8.1	11.6	3.8	6.6	10.0
+60/ +80	5.6	8.6	12.4	4.4	7.4	11.1