

**F5**  
**603380.347**

$n_d = 1.60342$	$v_d = 38.03$	$n_F - n_C = 0.015867$
$n_e = 1.60718$	$v_e = 37.77$	$n_{F'} - n_{C'} = 0.016078$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.56934
$n_{1970.1}$	1970.1	1.57427
$n_{1529.6}$	1529.6	1.57979
$n_{1060.0}$	1060.0	1.58636
$n_t$	1014.0	1.58721
$n_s$	852.1	1.59093
$n_r$	706.5	1.59616
$n_C$	656.3	1.59875
$n_{C'}$	643.8	1.59948
$n_{632.8}$	632.8	1.60017
$n_D$	589.3	1.60328
$n_d$	587.6	1.60342
$n_e$	546.1	1.60718
$n_F$	486.1	1.61461
$n_{F'}$	480.0	1.61556
$n_g$	435.8	1.62381
$n_h$	404.7	1.63176
$n_i$	365.0	1.64606
$n_{334.1}$	334.1	1.66276
$n_{312.6}$	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	0.787	0.550
2325	0.842	0.650
1970	0.941	0.860
1530	0.995	0.987
1060	0.999	0.998
700	0.999	0.997
660	0.998	0.996
620	0.998	0.995
580	0.998	0.995
546	0.998	0.995
500	0.998	0.994
460	0.996	0.991
436	0.996	0.990
420	0.995	0.988
405	0.994	0.985
400	0.993	0.982
390	0.989	0.973
380	0.984	0.960
370	0.971	0.930
365	0.963	0.910
350	0.896	0.760
334	0.618	0.300
320	0.080	
310		
300		
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2346
$P_{C,s}$	0.4925
$P_{d,C}$	0.2946
$P_{e,d}$	0.2371
$P_{g,F}$	0.5795
$P_{i,h}$	0.9015
$P'_{s,t}$	0.2315
$P'_{C',s}$	0.5317
$P'_{d,C'}$	0.2451
$P'_{e,d}$	0.2340
$P'_{g,F'}$	0.5131
$P'_{i,h}$	0.8897

Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"	
$\Delta P_{C,t}$	0.0017
$\Delta P_{C,s}$	0.0009
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0003
$\Delta P_{i,g}$	-0.0028

Constants of Dispersion Formula	
$B_1$	1.3104463
$B_2$	0.19603426
$B_3$	0.96612977
$C_1$	0.00958633048
$C_2$	0.0457627627
$C_3$	115.011883

Constants of Dispersion dn/dT	
$D_0$	$2.13 \cdot 10^{-6}$
$D_1$	$1.65 \cdot 10^{-8}$
$D_2$	$-6.98 \cdot 10^{-11}$
$E_0$	$1.02 \cdot 10^{-6}$
$E_1$	$6.56 \cdot 10^{-10}$
$\lambda_{TK}$ [μm]	0.208

Color Code	
$\lambda_{80}/\lambda_5$	35/32
(* = $\lambda_{70}/\lambda_5$ )	

Remarks	
lead containing glass type	

Other Properties	
$\alpha_{-30/+70^\circ C}$ [ $10^{-6}/K$ ]	8.0
$\alpha_{+20/+300^\circ C}$ [ $10^{-6}/K$ ]	8.9
$T_g$ [°C]	438
$T_{10}^{13.0}$ [°C]	425
$T_{10}^{7.6}$ [°C]	608
$c_p$ [J/(g·K)]	0.560
$\lambda$ [W/(m·K)]	0.880
$\rho$ [g/cm <sup>3</sup> ]	3.47
$E$ [ $10^3$ N/mm <sup>2</sup> ]	58
$\mu$	0.220
$K$ [ $10^{-6}$ mm <sup>2</sup> /N]	2.92
$HK_{0.1/20}$	450
<b>HG</b>	3
<b>CR</b>	1
<b>FR</b>	0
<b>SR</b>	1
<b>AR</b>	2.3
<b>PR</b>	2

Temperature Coefficients of Refractive Index						
[°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	2.5	4.0	5.5	0.4	1.8	3.3
+20/ +40	3.0	4.6	6.2	1.6	3.2	4.8
+60/ +80	3.1	4.8	6.5	2.0	3.7	5.4