

## N-SF57HTultra 847238.353

$n_d = 1.84666$	$v_d = 23.78$	$n_F - n_C = 0.035604$
$n_e = 1.85504$	$v_e = 23.59$	$n_{F'} - n_{C'} = 0.036247$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.78502
$n_{1970.1}$	1970.1	1.79190
$n_{1529.6}$	1529.6	1.80011
$n_{1060.0}$	1060.0	1.81138
$n_t$	1014.0	1.81296
$n_s$	852.1	1.82023
$n_r$	706.5	1.83099
$n_C$	656.3	1.83650
$n_{C'}$	643.8	1.83807
$n_{632.8}$	632.8	1.83956
$n_D$	589.3	1.84635
$n_d$	587.6	1.84666
$n_e$	546.1	1.85504
$n_F$	486.1	1.87210
$n_{F'}$	480.0	1.87432
$n_g$	435.8	1.89423
$n_h$	404.7	1.91440
$n_i$	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	0.806	0.584
2325	0.838	0.642
1970	0.956	0.893
1530	0.992	0.980
1060	0.999	0.998
700	0.995	0.988
660	0.994	0.985
620	0.993	0.983
580	0.992	0.981
546	0.989	0.973
500	0.978	0.947
460	0.962	0.908
436	0.943	0.864
420	0.917	0.805
405	0.864	0.693
400	0.830	0.627
390	0.702	0.413
380	0.420	0.114
370	0.063	0.001
365	0.003	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2042
$P_{C,s}$	0.4568
$P_{d,C}$	0.2855
$P_{e,d}$	0.2353
$P_{g,F}$	0.6216
$P_{i,h}$	
$P'_{s,t}$	0.2005
$P'_{C',s}$	0.4922
$P'_{d,C'}$	0.2369
$P'_{e,d}$	0.2311
$P'_{g,F'}$	0.5493
$P'_{i,h}$	

### Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"

$\Delta P_{C,t}$	0.0032
$\Delta P_{C,s}$	-0.0015
$\Delta P_{F,e}$	0.0033
$\Delta P_{g,F}$	0.0178
$\Delta P_{i,g}$	

Constants of Dispersion Formula	
$B_1$	1.87543831
$B_2$	0.37375749
$B_3$	2.30001797
$C_1$	0.0141749518
$C_2$	0.0640509927
$C_3$	177.389795

Constants of Dispersion $dn/dT$	
$D_0$	$-4.51 \cdot 10^{-6}$
$D_1$	$8.73 \cdot 10^{-9}$
$D_2$	$-1.64 \cdot 10^{-11}$
$E_0$	$1.07 \cdot 10^{-6}$
$E_1$	$1.57 \cdot 10^{-9}$
$\lambda_{TK} [\mu m]$	0.295

Color Code	
$\lambda_{80}/\lambda_5$	40/37*
(*= $\lambda_{70}/\lambda_5$ )	

Remarks

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	8.5
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	9.9
$T_g [^\circ C]$	629
$T_{10}^{13.0} [^\circ C]$	616
$T_{10}^{7.6} [^\circ C]$	716
$c_p [J/(g \cdot K)]$	0.660
$\lambda [W/(m \cdot K)]$	0.990
$\rho [g/cm^3]$	3.53
$E [10^3 N/mm^2]$	96
$\mu$	0.260
$K [10^{-6} mm^2/N]$	2.78
$HK_{0.1/20}$	520
$HG$	4
$CR$	1
$FR$	0
$SR$	1
$AR$	1
$PR$	1

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	-0.5	1.7	4.9	-2.9	-0.8	2.3
+20/ +40	-0.5	2.2	6.0	-2.1	0.6	4.3
+60/ +80	-0.4	2.6	6.9	-1.6	1.3	5.6