

N-SF57HT 847238.353

$n_d = 1.84666$
 $n_e = 1.85504$

$v_d = 23.78$
 $v_e = 23.59$

$n_F - n_C = 0.035604$
 $n_{F'} - n_{C'} = 0.036247$

Refractive Indices

	λ [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	

Constants of Dispersion Formula

B_1	1.875438310
B_2	0.373757490
B_3	2.300017970
C_1	0.014174952
C_2	0.064050927
C_3	177.38979500

Constants of Formula for dn/dT

D_0	-4.51E-06
D_1	8.73E-09
D_2	-1.64E-11
E_0	1.07E-06
E_1	1.57E-09
λ_{TK} [μm]	0.295

Temperature Coefficients of the 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	-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

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.810	0.580
2325	0.840	0.640
1970	0.956	0.890
1530	0.992	0.980
1060	0.999	0.998
700	0.992	0.979
660	0.988	0.971
620	0.989	0.973
580	0.991	0.977
546	0.987	0.967
500	0.972	0.930
460	0.951	0.880
436	0.930	0.830
420	0.900	0.760
405	0.830	0.630
400	0.790	0.560
390	0.660	0.350
380	0.380	0.090
370	0.060	0.000
365	0.000	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

$\lambda_{70} / \lambda_{50}$ 41/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2042
$P_{C,s}$	0.4568
$P_{d,C}$	0.2855
$P_{e,d}$	0.2353
$P_{g,F}$	0.6216
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	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 Rel. Partial Disp.

ΔP 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
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70^\circ\text{C}}$ [$10^{-6}/K$]	8.5
$\alpha_{+20/+300^\circ\text{C}}$ [$10^{-6}/K$]	9.9
T_g [°C]	629
T_{10}^{13} [°C]	616
$T_{10}^{7.6}$ [°C]	716
c_p [J/(g*K)]	0.660
λ [W/(m*K)]	0.990
ρ [g/cm ³]	3.53
E [10^3 N/mm ²]	96
μ	0.260
K [10^{-6} mm ² /N]	2.78
$HK_{0.1/20}$	520
HG	4
Abrasion Aa	175