Data Sheet

SCHOTT

N-LAF21
788475.428

n_d = 1.78800	ν_d = 47.49	$n_F - n_C$ = 0.016593
n_e = 1.79195	ν_e = 47.25	$n_{F'} - n_{C'}$ = 0.016761

Refractive Indices		
	λ [nm]	
$n_{2325.4}$	2325.4	1.74419
$n_{1970.1}$	1970.1	1.75191
$n_{1529.6}$	1529.6	1.76014
$n_{1060.0}$	1060.0	1.76892
n_t	1014.0	1.76995
n_s	852.1	1.77434
n_r	706.5	1.78019
n_C	656.3	1.78301
$n_{C'}$	643.8	1.78380
$n_{632.8}$	632.8	1.78454
n_D	589.3	1.78785
n_d	587.6	1.78800
n_e	546.1	1.79195
n_F	486.1	1.79960
$n_{F'}$	480.0	1.80056
n_g	435.8	1.80882
n_h	404.7	1.81657
n_i	365.0	1.83002
$n_{334.1}$	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	1.87134529
B_2	0.250783010
B_3	1.220486390
C_1	0.00933322280
C_2	0.0345637762
C_3	83.2404866

Constants of Formula for dn/dT	
D_0	3.11E-06
D_1	1.13E-08
D_2	-2.07E-11
E_0	5.88E-07
E_1	6.32E-10
λ_{TK} [µm]	0.199

Internal Transmittance τ_i		
λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.430	0.120
2325	0.710	0.430
1970	0.940	0.860
1530	0.988	0.971
1060	0.998	0.996
700	0.998	0.994
660	0.997	0.993
620	0.997	0.992
580	0.997	0.992
546	0.997	0.993
500	0.996	0.989
460	0.990	0.976
436	0.985	0.964
420	0.981	0.952
405	0.971	0.930
400	0.966	0.920
390	0.950	0.880
380	0.920	0.810
370	0.870	0.710
365	0.830	0.630
350	0.640	0.330
334	0.280	0.040
320	0.030	0.000
310	0.000	
300		
290		
280		
270		
260		
250		

Color Code	
λ_{80} / λ_5	39/32

(*= λ_{70}/λ_5)

Remarks

Relative Partial Dispersion	
$P_{s,t}$	0.2646
$P_{C,s}$	0.5222
$P_{d,C}$	0.3009
$P_{e,d}$	0.2380
$P_{g,F}$	0.5555
$P_{i,h}$	0.8106
$P'_{s,t}$	0.2619
$P'_{C',s}$	0.5641
$P'_{d,C'}$	0.2507
$P'_{e,d}$	0.2356
$P'_{g,F'}$	0.4927
$P'_{i,h}$	0.8025

Deviation of Relative Partial Dispersion ΔP from the normal line	
$\Delta P_{C,t}$	0.0165
$\Delta P_{C,s}$	0.0086
$\Delta P_{F,e}$	-0.0024
$\Delta P_{g,F}$	-0.0084
$\Delta P_{i,g}$	-0.0481

Other Properties	
$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.1
T_g [°C]	653
$T_{10^{13}}$ [°C]	659
$T_{10^{7.6}}$ [°C]	729
c_p [J/(g*K)]	0.550
λ [W/(m•K)]	0.830
ρ [g/cm^3]	4.28
E [10^3 N/mm^2]	124
µ	0.295
K [10^{-6} mm^2/N]	1.46
$HK_{0.1/20}$	730
HG	2
CR	1
FR	1
SR	51.3
AR	1
PR	1.3

Temperature Coefficients of the Refractive Index						
	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	**1060.0**	**e**	**g**	**1060.0**	**e**	**g**
-40/-20	3.8	4.8	5.8	1.4	2.4	3.3
+20/+40	3.9	5.1	6.2	2.3	3.5	4.6
+60/+80	4.0	5.3	6.5	2.8	4.1	5.3