Data Sheet

SCHOTT

N-LAF35
743494.412

$n_d = 1.74330$	$\nu_d = 49.40$	$n_F - n_C = 0.015047$
$n_e = 1.74688$	$\nu_e = 49.16$	$n_{F'} - n_{C'} = 0.015194$

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	
$n_{1970.1}$	1970.1	
$n_{1529.6}$	1529.6	
$n_{1060.0}$	1060.0	1.72588
n_t	1014.0	1.72683
n_s	852.1	1.73086
n_r	706.5	1.73620
n_C	656.3	1.73876
$n_{C'}$	643.8	1.73948
$n_{632.8}$	632.8	1.74015
n_D	589.3	1.74317
n_d	587.6	1.74330
n_e	546.1	1.74688
n_F	486.1	1.75381
$n_{F'}$	480.0	1.75467
n_g	435.8	1.76212
n_h	404.7	1.76908
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	1.51697436
B_2	0.455875464
B_3	1.07469242
C_1	0.00750943203
C_2	0.0260046715
C_3	80.5945159

Constants of Dispersion dn/dT

D_0	$8.98 \cdot 10^{-6}$
D_1	$1.26 \cdot 10^{-8}$
D_2	$-1.23 \cdot 10^{-11}$
E_0	$6.24 \cdot 10^{-7}$
E_1	$6.86 \cdot 10^{-10}$
λ_{TK} [µm]	0.194

Internal Transmittance τ_i

λ [nm]	τ_i (10mm)	τ_i (25mm)
2500	0.398	0.100
2325	0.713	0.430
1970	0.937	0.850
1530	0.988	0.970
1060	0.998	0.995
700	0.998	0.996
660	0.998	0.996
620	0.998	0.994
580	0.998	0.994
546	0.998	0.995
500	0.997	0.992
460	0.994	0.985
436	0.990	0.976
420	0.987	0.967
405	0.980	0.950
400	0.976	0.940
390	0.966	0.920
380	0.948	0.880
370	0.918	0.810
365	0.898	0.760
350	0.788	0.550
334	0.592	0.270
320	0.348	0.200
310	0.152	0.080
300	0.026	
290		
280		
270		
260		
250		

Color Code

λ_{80}/λ_5	38/30
(*= λ_{70}/λ_5)	

Remarks

Relative Partial Dispersion

$P_{s,t}$	0.2674
$P_{C,s}$	0.5253
$P_{d,C}$	0.3017
$P_{e,d}$	0.2381
$P_{g,F}$	0.5523
$P_{i,h}$	
$P'_{s,t}$	0.2648
$P'_{C',s}$	0.5676
$P'_{d,C'}$	0.2514
$P'_{e,d}$	0.2358
$P'_{g,F'}$	0.4899
$P'_{i,h}$	

Deviation of Relative Partial Dispersions ΔP from the "Normal Line"

$\Delta P_{C,t}$	0.0134
$\Delta P_{C,s}$	0.0072
$\Delta P_{F,e}$	-0.0022
$\Delta P_{g,F}$	-0.0084
$\Delta P_{i,g}$	

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.4
T_g [°C]	589
$T_{10}^{13.0}$ [°C]	585
$T_{10}^{7.6}$ [°C]	669
c_p [J/(g·K)]	0.570
λ [W/(m·K)]	0.800
ρ [g/cm^3]	4.12
E [10^3 N/mm^2]	109
μ	0.301
K [10^{-6} mm^2/N]	2.29
HK$_{0.1/20}$	660
HG	2
CR	2
FR	1
SR	52.3
AR	1
PR	3.3

Temperature Coefficients of 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	7.0	8.1	9.2	4.7	5.7	6.7
+20/ +40	7.1	8.4	9.6	5.6	6.9	8.0
+60/ +80	7.3	8.7	10.0	6.2	7.5	8.8