

Data Sheet

SCHOTT

N-LAF2
744449.430

$n_d = 1.74397$	$v_d = 44.85$	$n_F - n_C = 0.016588$
$n_e = 1.74791$	$v_e = 44.57$	$n_F' - n_C' = 0.016780$

Refractive Indices		
	λ [nm]	
$n_{2325.4}$	2325.4	1.70582
$n_{1970.1}$	1970.1	1.71169
$n_{1529.6}$	1529.6	1.71816
$n_{1060.0}$	1060.0	1.72563
n_t	1014.0	1.72656
n_s	852.1	1.73064
n_r	706.5	1.73627
n_c	656.3	1.73903
$n_{c'}$	643.8	1.73981
$n_{632.8}$	632.8	1.74054
n_d	589.3	1.74383
n_e	587.6	1.74397
n_f	546.1	1.74791
$n_{f'}$	486.1	1.75562
$n_{f''}$	480.0	1.75659
n_g	435.8	1.76500
n_h	404.7	1.77298
n_i	365.0	1.78703
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Internal Transmittance τ_i		
λ [nm]	τ_i (10mm)	τ_i (25mm)
2500	0.693	0.400
2325	0.862	0.690
1970	0.971	0.930
1530	0.996	0.990
1060	0.999	0.997
700	0.998	0.996
660	0.997	0.993
620	0.997	0.992
580	0.997	0.993
546	0.998	0.994
500	0.993	0.983
460	0.985	0.962
436	0.976	0.940
420	0.965	0.915
405	0.944	0.865
400	0.933	0.840
390	0.896	0.760
380	0.831	0.630
370	0.713	0.430
365	0.626	0.310
350	0.229	0.025
334		
320		
310		
300		
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2459
$P_{C,s}$	0.5057
$P_{d,C}$	0.2979
$P_{e,d}$	0.2377
$P_{g,F}$	0.5656
$P_{i,h}$	0.8470
$P'_{s,t}$	0.2431
$P'_{C,s}$	0.5464
$P'_{d,C}$	0.2481
$P'_{e,d}$	0.2350
$P'_{g,F}$	0.5012
$P'_{i,h}$	0.8373

Deviation of Relative Partial Dispersions ΔP from the "Normal Line"	
$\Delta P_{C,t}$	-0.0061
$\Delta P_{C,s}$	-0.0017
$\Delta P_{F,e}$	-0.0004
$\Delta P_{g,F}$	-0.0027
$\Delta P_{i,g}$	-0.0202

Other Properties	
$\alpha_{-30/+70^\circ\text{C}} [10^{-6}/\text{K}]$	8.1
$\alpha_{+20/+300^\circ\text{C}} [10^{-6}/\text{K}]$	9.1
$T_g [\text{ }^\circ\text{C}]$	653
$T_{10}^{13.0} [\text{ }^\circ\text{C}]$	645
$T_{10}^{7.6} [\text{ }^\circ\text{C}]$	742
$c_p [\text{J/(g}\cdot\text{K})]$	0.510
$\lambda [\text{W}/(\text{m}\cdot\text{K})]$	0.670
$\rho [\text{g}/\text{cm}^3]$	4.30
$E [10^3 \text{ N/mm}^2]$	94
μ	0.288
$K [10^{-6} \text{ mm}^2/\text{N}]$	1.42
$HK_{0.1/20}$	530
HG	6
B	1
CR	2
FR	3
SR	52.2
AR	1
PR	2.2

Constants of Dispersion Formula		
B_1	1.80984227	
B_2	0.15729555	
B_3	1.0930037	
C_1	0.0101711622	
C_2	0.0442431765	
C_3	100.687748	

Constants of Dispersion dn/dT		
D_0	$-3.64 \cdot 10^{-6}$	
D_1	$9.20 \cdot 10^{-9}$	
D_2	$-6.00 \cdot 10^{-12}$	
E_0	$6.43 \cdot 10^{-7}$	
E_1	$6.11 \cdot 10^{-10}$	
$\lambda_{TK} [\mu\text{m}]$	0.22	

Color Code	
λ_{80}/λ_5	40/34
($= \lambda_{70}/\lambda_5$)	

Remarks	

Temperature Coefficients of Refractive Index						
	$\Delta n_{\text{rel}}/\Delta T [10^{-6}/\text{K}]$		$\Delta n_{\text{abs}}/\Delta T [10^{-6}/\text{K}]$			
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	0.0	1.0	2.1	-2.3	-1.3	-0.3
+20/+40	-0.1	1.0	2.3	-1.6	-0.5	0.7
+60/+80	-0.1	1.2	2.5	-1.2	0.0	1.3