

Data Sheet

**N-SF11
785257.322**

SCHOTT

n_d = 1.78472	v_d = 25.68	n_F - n_C = 0.030558
n_e = 1.79192	v_e = 25.47	n_F - n_C = 0.031088

Refractive Indices		
	λ [nm]	
n_{2325.4}	2325.4	1.72937
n_{1970.1}	1970.1	1.73600
n_{1529.6}	1529.6	1.74377
n_{1060.0}	1060.0	1.75401
n_t	1014.0	1.75542
n_s	852.1	1.76182
n_r	706.5	1.77119
n_C	656.3	1.77596
n_{C'}	643.8	1.77732
n_{632.8}	632.8	1.77860
n_D	589.3	1.78446
n_d	587.6	1.78472
n_e	546.1	1.79192
n_F	486.1	1.80651
n_{F'}	480.0	1.80841
n_g	435.8	1.82533
n_h	404.7	1.84235
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 τ_i		
λ [nm]	τ _i (10mm)	τ _i (25mm)
2500	0.826	0.620
2325	0.867	0.700
1970	0.965	0.915
1530	0.994	0.985
1060	0.999	0.998
700	0.994	0.985
660	0.992	0.981
620	0.992	0.981
580	0.994	0.984
546	0.991	0.978
500	0.981	0.953
460	0.967	0.920
436	0.946	0.870
420	0.919	0.810
405	0.852	0.670
400	0.815	0.600
390	0.686	0.390
380	0.428	0.120
370	0.083	0.002
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Relative Partial Dispersion	
P _{s,t}	0.2095
P _{C,s}	0.4625
P _{d,C}	0.2868
P _{e,d}	0.2355
P _{g,F}	0.6156
P _{i,h}	
P' _{s,t}	0.2059
P' _{C,s}	0.4984
P' _{d,C}	0.2381
P' _{e,d}	0.2315
P' _{g,F}	0.5442
P' _{i,h}	

Deviation of Relative Partial Dispersions ΔP from the "Normal Line"	
ΔP _{C,t}	0.0052
ΔP _{C,s}	-0.0003
ΔP _{F,e}	0.0027
ΔP _{g,F}	0.0150
ΔP _{i,g}	

Other Properties	
α _{-30/+70°C} [10 ⁻⁶ /K]	8.5
α _{+20/+300°C} [10 ⁻⁶ /K]	9.9
T _g [°C]	592
T ₁₀ ^{13.0} [°C]	590
T ₁₀ ^{7.6} [°C]	688
c _p [J/(g·K)]	0.710
λ [W/(m·K)]	0.950
ρ [g/cm ³]	3.22
E [10 ³ N/mm ²]	92
μ	0.257
K [10 ⁻⁶ mm ² /N]	2.94
HK _{0.1/20}	615
HG	4
B	1
CR	1
FR	0
SR	1
AR	1
PR	1

Constants of Dispersion Formula	
B₁	1.73759695
B₂	0.313747346
B₃	1.89878101
C₁	0.013188707
C₂	0.0623068142
C₃	155.23629

Color Code	
λ ₈₀ /λ ₅	44/37
(*= λ ₇₀ /λ ₅)	

Remarks	

Temperature Coefficients of Refractive Index						
	Δn _{rel} /ΔT [10 ⁻⁶ /K]		Δn _{abs} /ΔT [10 ⁻⁶ /K]			
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	0.1	2.0	4.6	-2.3	-0.5	2.1
+20/+40	0.1	2.4	5.6	-1.4	0.8	4.0
+60/+80	0.2	2.7	6.3	-1.0	1.5	5.1