

Data Sheet

**N-BASF2
664360.315**

SCHOTT

n_d = 1.66446	v_d = 36.00	n_F - n_C = 0.018457
n_e = 1.66883	v_e = 35.73	n_F - n_C = 0.018720

Refractive Indices		
	λ [nm]	
n_{2325.4}	2325.4	1.62552
n_{1970.1}	1970.1	1.63109
n_{1529.6}	1529.6	1.63734
n_{1060.0}	1060.0	1.64484
n_t	1014.0	1.64581
n_s	852.1	1.65007
n_r	706.5	1.65607
n_C	656.3	1.65905
n_{C'}	643.8	1.65990
n_{632.8}	632.8	1.66070
n_D	589.3	1.66430
n_d	587.6	1.66446
n_e	546.1	1.66883
n_F	486.1	1.67751
n_{F'}	480.0	1.67862
n_g	435.8	1.68838
n_h	404.7	1.69792
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	0.857	0.680
2325	0.896	0.760
1970	0.971	0.930
1530	0.994	0.985
1060	0.999	0.997
700	0.996	0.990
660	0.994	0.985
620	0.994	0.985
580	0.995	0.987
546	0.994	0.985
500	0.988	0.971
460	0.980	0.951
436	0.971	0.930
420	0.954	0.890
405	0.915	0.800
400	0.891	0.750
390	0.804	0.580
380	0.634	0.320
370	0.325	0.060
365	0.158	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Relative Partial Dispersion	
P _{s,t}	0.2309
P _{C,s}	0.4869
P _{d,C}	0.2929
P _{e,d}	0.2367
P _{g,F}	0.5890
P _{i,h}	
P' _{s,t}	0.2277
P' _{C,s}	0.5253
P' _{d,C}	0.2435
P' _{e,d}	0.2333
P' _{g,F}	0.5214
P' _{i,h}	

Deviation of Relative Partial Dispersions ΔP from the "Normal Line"	
ΔP _{C,t}	0.0021
ΔP _{C,s}	0.0001
ΔP _{F,e}	0.0010
ΔP _{g,F}	0.0057
ΔP _{i,g}	

Other Properties	
α _{-30/+70°C} [10 ⁻⁶ /K]	7.1
α _{+20/+300°C} [10 ⁻⁶ /K]	8.1
T _g [°C]	619
T ₁₀ ^{13.0} [°C]	622
T ₁₀ ^{7.6} [°C]	766
c _p [J/(g·K)]	0.660
λ [W/(m·K)]	0.940
ρ [g/cm ³]	3.15
E [10 ³ N/mm ²]	84
μ	0.247
K [10 ⁻⁶ mm ² /N]	3.04
HK _{0.1/20}	580
HG	3
B	1
CR	1
FR	0
SR	1
AR	1
PR	1

Constants of Dispersion Formula	
B₁	1.53652081
B₂	0.156971102
B₃	1.30196815
C₁	0.0108435729
C₂	0.0562278762
C₃	131.3397

Color Code	
λ ₈₀ /λ ₅	41/36
(*= 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	2.8	4.1	5.6	0.6	1.9	3.3
+20/+40	2.9	4.4	6.2	1.5	3.0	4.7
+60/+80	3.1	4.8	6.7	2.0	3.6	5.5