Data Sheet

SCHOTT

N-BASF2
664360.315

$n_d = 1.66446$	$\nu_d = 36.00$	$n_F - n_C = 0.018457$
$n_e = 1.66883$	$\nu_e = 35.73$	$n_{F'} - n_{C'} = 0.018720$

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	

Constants of Dispersion Formula

B_1	1.53652081
B_2	0.156971102
B_3	1.30196815
C_1	0.0108435729
C_2	0.0562278762
C_3	131.3397

Constants of Dispersion dn/dT

D_0	$1.89 \cdot 10^{-6}$
D_1	$1.22 \cdot 10^{-8}$
D_2	$-1.61 \cdot 10^{-11}$
E_0	$7.77 \cdot 10^{-7}$
E_1	$9.96 \cdot 10^{-10}$
λ_{TK} [µm]	0.256

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		

Color Code

λ_{80}/λ_5	41/36
(*= λ_{70}/λ_5)	

Remarks

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"

$\Delta P_{C,t}$	0.0021
$\Delta P_{C,s}$	0.0001
$\Delta P_{F,e}$	0.0010
$\Delta P_{g,F}$	0.0057
$\Delta P_{i,g}$	

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.1
$\alpha_{+20/+300°C}$ [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
CR	1
FR	0
SR	1
AR	1
PR	1

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	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