Data Sheet

SCHOTT

N-SF2
648338.272

$n_d = 1.64769$	$\nu_d = 33.82$	$n_F - n_C = 0.019151$
$n_e = 1.65222$	$\nu_e = 33.56$	$n_{F'} - n_{C'} = 0.019435$

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.60661
$n_{1970.1}$	1970.1	1.61268
$n_{1529.6}$	1529.6	1.61944
$n_{1060.0}$	1060.0	1.62738
n_t	1014.0	1.62839
n_s	852.1	1.63282
n_r	706.5	1.63902
n_C	656.3	1.64210
$n_{C'}$	643.8	1.64298
$n_{632.8}$	632.8	1.64380
n_D	589.3	1.64752
n_d	587.6	1.64769
n_e	546.1	1.65222
n_F	486.1	1.66125
$n_{F'}$	480.0	1.66241
n_g	435.8	1.67265
n_h	404.7	1.68273
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	1.47343127
B_2	0.163681849
B_3	1.36920899
C_1	0.0109019098
C_2	0.0585683687
C_3	127.404933

Constants of Dispersion dn/dT

D_0	$3.10 \cdot 10^{-6}$
D_1	$1.75 \cdot 10^{-8}$
D_2	$6.62 \cdot 10^{-11}$
E_0	$7.51 \cdot 10^{-7}$
E_1	$8.99 \cdot 10^{-10}$
λ_{TK} [µm]	0.277

Internal Transmittance τ_i

λ [nm]	τ_i (10mm)	τ_i (25mm)
2500	0.852	0.670
2325	0.896	0.760
1970	0.971	0.930
1530	0.994	0.984
1060	0.999	0.997
700	0.995	0.987
660	0.994	0.984
620	0.994	0.984
580	0.995	0.987
546	0.994	0.986
500	0.990	0.975
460	0.984	0.961
436	0.979	0.949
420	0.970	0.926
405	0.944	0.865
400	0.928	0.830
390	0.857	0.680
380	0.693	0.400
370	0.325	0.060
365	0.132	0.007
350	0.001	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ_{80}/λ_5	40/36
(*= λ_{70}/λ_5)	

Remarks

Relative Partial Dispersion

$P_{s,t}$	0.2311
$P_{C,s}$	0.4848
$P_{d,C}$	0.2918
$P_{e,d}$	0.2364
$P_{g,F}$	0.5950
$P_{i,h}$	
$P'_{s,t}$	0.2277
$P'_{C',s}$	0.5228
$P'_{d,C'}$	0.2425
$P'_{e,d}$	0.2329
$P'_{g,F'}$	0.5267
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0106
$\Delta P_{C,s}$	0.0031
$\Delta P_{F,e}$	0.0012
$\Delta P_{g,F}$	0.0081
$\Delta P_{i,g}$	

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.7
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.8
T_g [°C]	608
$T_{10^{13.0}}$ [°C]	607
$T_{10^{7.6}}$ [°C]	731
c_p [J/(g·K)]	0.790
λ [W/(m·K)]	1.140
ρ [g/cm³]	2.72
E [10^3 N/mm²]	86
μ	0.231
K [10^{-6} mm²/N]	3.06
HK$_{0.1/20}$	539
HG	
CR	1
FR	0
SR	1
AR	1.2
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	3.4	4.8	6.4	1.3	2.5	4.1
+20/ +40	3.5	5.1	7.0	2.1	3.6	5.5
+60/ +80	4.2	5.9	8.0	3.1	4.8	6.9