Data Sheet

SCHOTT

N-SK11
564608.308

$n_d = 1.56384$	$\nu_d = 60.80$	$n_F - n_C = 0.009274$
$n_e = 1.56605$	$\nu_e = 60.55$	$n_{F'} - n_{C'} = 0.009349$

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.53598
$n_{1970.1}$	1970.1	1.54131
$n_{1529.6}$	1529.6	1.54693
$n_{1060.0}$	1060.0	1.55266
n_t	1014.0	1.55330
n_s	852.1	1.55597
n_r	706.5	1.55939
n_C	656.3	1.56101
$n_{C'}$	643.8	1.56146
$n_{632.8}$	632.8	1.56188
n_D	589.3	1.56376
n_d	587.6	1.56384
n_e	546.1	1.56605
n_F	486.1	1.57028
$n_{F'}$	480.0	1.57081
n_g	435.8	1.57530
n_h	404.7	1.57946
n_i	365.0	1.58653
$n_{334.1}$	334.1	1.59414
$n_{312.6}$	312.6	1.60110
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.17963631
B_2	0.229817295
B_3	0.935789652
C_1	0.00680282081
C_2	0.0219737205
C_3	101.513232

Constants of Dispersion dn/dT

D_0	$2.14 \cdot 10^{-6}$
D_1	$1.27 \cdot 10^{-8}$
D_2	$-7.21 \cdot 10^{-11}$
E_0	$3.51 \cdot 10^{-7}$
E_1	$5.41 \cdot 10^{-10}$
λ_{TK} [µm]	0.238

Internal Transmittance τ_i

λ [nm]	τ_i (10mm)	τ_i (25mm)
2500	0.782	0.540
2325	0.882	0.730
1970	0.967	0.920
1530	0.994	0.984
1060	0.998	0.995
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.996
546	0.999	0.997
500	0.998	0.994
460	0.996	0.990
436	0.995	0.988
420	0.994	0.985
405	0.992	0.980
400	0.990	0.975
390	0.988	0.970
380	0.985	0.963
370	0.980	0.950
365	0.976	0.940
350	0.950	0.880
334	0.872	0.710
320	0.700	0.410
310	0.480	0.160
300	0.212	0.020
290	0.058	
280		
270		
260		
250		

Color Code

λ_{80}/λ_5	34/29
(*= λ_{70}/λ_5)	

Remarks

Relative Partial Dispersion

$P_{s,t}$	0.2874
$P_{C,s}$	0.5436
$P_{d,C}$	0.3051
$P_{e,d}$	0.2385
$P_{g,F}$	0.5411
$P_{i,h}$	0.7626
$P'_{s,t}$	0.2850
$P'_{C',s}$	0.5875
$P'_{d,C'}$	0.2544
$P'_{e,d}$	0.2366
$P'_{g,F'}$	0.4805
$P'_{i,h}$	0.7564

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

$\Delta P_{C,t}$	-0.0024
$\Delta P_{C,s}$	-0.0011
$\Delta P_{F,e}$	0.0000
$\Delta P_{g,F}$	-0.0004
$\Delta P_{i,g}$	-0.0037

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.6
T_g [°C]	610
$T_{10}^{13.0}$ [°C]	601
$T_{10}^{7.6}$ [°C]	760
c_p [J/(g·K)]	
λ [W/(m·K)]	
ρ [g/cm^3]	3.08
E [10^3 N/mm^2]	79
μ	0.239
K [10^{-6} mm^2/N]	2.45
HK$_{0.1/20}$	570
HG	2
CR	2
FR	0
SR	2
AR	1
PR	2.3

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	2.4	2.8	3.4	0.3	0.7	1.2
+20/ +40	2.6	3.2	3.8	1.2	1.8	2.4
+60/ +80	2.5	3.2	3.9	1.5	2.1	2.8