Datasheet

N-SK11
564608.308

n_d = 1.56384 ν_d = 60.80 $n_F - n_C$ = 0.009274
n_e = 1.56605 ν_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	1.179636310
B_2	0.229817295
B_3	0.935789652
C_1	0.006802821
C_2	0.0219737205
C_3	101.51323200

Constants of Formula for dn/dT

D_0	2.14E-06
D_1	1.27E-08
D_2	-7.21E-11
E_0	3.51E-07
E_1	5.41E-10
λ_{TK} [µm]	0.238

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.78	0.54
2325	0.88	0.73
1970	0.967	0.92
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	0.94
350	0.950	0.88
334	0.87	0.71
320	0.70	0.41
310	0.48	0.16
300	0.21	0.02
290	0.06	
280		
270		
260		
250		

Color Code

λ80 / λ5	34/29

Remarks

Relative Partial Dispersion P

$P_{s,t}$	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

Relative Partial Dispersion P'

$P'_{s,t}$	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 Rel. Partial Disp. 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

Chemical Properties

CR	2
FR	0
SR	2
AR	1
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.6
T_g [°C]	610
$T_{10^{13}}$ [°C]	601
$T_{10^{7.6}}$ [°C]	760
c_p [J/(g*K)]	0.650
λ [W/(m•K)]	0.920
ρ [g/cm³]	3.08
E [10^3 N/mm²]	79
µ	0.239
K [10^{-6} mm²/N]	2.45
$HK_{0.1/20}$	570
HG	2

Temperature Coefficients of the 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