Data Sheet

SCHOTT

N-SK2
607567.355

$n_d = 1.60738$	$\nu_d = 56.65$	$n_F - n_C = 0.010722$
$n_e = 1.60994$	$\nu_e = 56.37$	$n_{F'} - n_{C'} = 0.010821$

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.57881
$n_{1970.1}$	1970.1	1.58378
$n_{1529.6}$	1529.6	1.58914
$n_{1060.0}$	1060.0	1.59490
n_t	1014.0	1.59558
n_s	852.1	1.59847
n_r	706.5	1.60230
n_C	656.3	1.60414
$n_{C'}$	643.8	1.60465
$n_{632.8}$	632.8	1.60513
n_D	589.3	1.60729
n_d	587.6	1.60738
n_e	546.1	1.60994
n_F	486.1	1.61486
$n_{F'}$	480.0	1.61547
n_g	435.8	1.62073
n_h	404.7	1.62562
n_i	365.0	1.63398
$n_{334.1}$	334.1	1.64304
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.28189012
B_2	0.257738258
B_3	0.96818604
C_1	0.0072719164
C_2	0.0242823527
C_3	110.377773

Constants of Dispersion dn/dT

D_0	$3.80 \cdot 10^{-6}$
D_1	$1.41 \cdot 10^{-8}$
D_2	$2.28 \cdot 10^{-11}$
E_0	$6.44 \cdot 10^{-7}$
E_1	$8.03 \cdot 10^{-11}$
λ_{TK} [µm]	0.108

Internal Transmittance τ_i

λ [nm]	τ_i (10mm)	τ_i (25mm)
2500	0.815	0.600
2325	0.896	0.760
1970	0.971	0.930
1530	0.995	0.988
1060	0.998	0.995
700	0.998	0.995
660	0.998	0.994
620	0.998	0.994
580	0.998	0.995
546	0.998	0.995
500	0.996	0.990
460	0.993	0.983
436	0.993	0.982
420	0.994	0.984
405	0.994	0.985
400	0.994	0.984
390	0.992	0.979
380	0.988	0.970
370	0.976	0.940
365	0.967	0.920
350	0.905	0.780
334	0.752	0.490
320	0.504	0.180
310	0.276	0.040
300	0.102	
290	0.020	
280		
270		
260		
250		

Color Code

λ_{80}/λ_5	33/28
(*= λ_{70}/λ_5)	

Remarks

step 0.5 available

Relative Partial Dispersion

$P_{s,t}$	0.2690
$P_{C,s}$	0.5285
$P_{d,C}$	0.3027
$P_{e,d}$	0.2384
$P_{g,F}$	0.5477
$P_{i,h}$	0.7802
$P'_{s,t}$	0.2666
$P'_{C',s}$	0.5713
$P'_{d,C'}$	0.2523
$P'_{e,d}$	0.2362
$P'_{g,F'}$	0.4860
$P'_{i,h}$	0.7730

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

$\Delta P_{C,t}$	-0.0162
$\Delta P_{C,s}$	-0.0064
$\Delta P_{F,e}$	0.0003
$\Delta P_{g,F}$	-0.0008
$\Delta P_{i,g}$	-0.0130

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.1
T_g [°C]	659
$T_{10}^{13.0}$ [°C]	659
$T_{10}^{7.6}$ [°C]	823
c_p [J/(g·K)]	0.595
λ [W/(m·K)]	0.776
ρ [g/cm^3]	3.55
E [10^3 N/mm^2]	78
μ	0.263
K [10^{-6} mm^2/N]	2.31
HK$_{0.1/20}$	550
HG	2
CR	2
FR	0
SR	2.2
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	3.7	4.6	5.3	1.5	2.4	3.1
+20/ +40	3.6	4.5	5.3	2.3	3.1	3.9
+60/ +80	4.0	4.9	5.7	2.9	3.8	4.5