Data Sheet

SCHOTT

N-BAK2
540597.286

$n_d = 1.53996$	$\nu_d = 59.71$	$n_F - n_C = 0.009043$
$n_e = 1.54212$	$\nu_e = 59.44$	$n_{F'} - n_{C'} = 0.009120$

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.51387
$n_{1970.1}$	1970.1	1.51871
$n_{1529.6}$	1529.6	1.52385
$n_{1060.0}$	1060.0	1.52919
n_t	1014.0	1.52980
n_s	852.1	1.53234
n_r	706.5	1.53564
n_C	656.3	1.53721
$n_{C'}$	643.8	1.53765
$n_{632.8}$	632.8	1.53806
n_D	589.3	1.53988
n_d	587.6	1.53996
n_e	546.1	1.54212
n_F	486.1	1.54625
$n_{F'}$	480.0	1.54677
n_g	435.8	1.55117
n_h	404.7	1.55525
n_i	365.0	1.56221
$n_{334.1}$	334.1	1.56971
$n_{312.6}$	312.6	1.57660
$n_{296.7}$	296.7	1.58287
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.01662154
B_2	0.319903051
B_3	0.937232995
C_1	0.00592383763
C_2	0.0203828415
C_3	113.118417

Constants of Dispersion dn/dT

D_0	$-1.45 \cdot 10^{-6}$
D_1	$1.10 \cdot 10^{-8}$
D_2	$4.89 \cdot 10^{-12}$
E_0	$5.16 \cdot 10^{-7}$
E_1	$3.05 \cdot 10^{-10}$
λ_{TK} [µm]	0.164

Internal Transmittance τ_i

λ [nm]	τ_i (10mm)	τ_i (25mm)
2500	0.758	0.500
2325	0.831	0.630
1970	0.937	0.850
1530	0.994	0.984
1060	0.999	0.997
700	0.998	0.996
660	0.998	0.995
620	0.998	0.994
580	0.998	0.995
546	0.998	0.995
500	0.998	0.994
460	0.997	0.992
436	0.997	0.992
420	0.997	0.993
405	0.997	0.993
400	0.997	0.993
390	0.997	0.992
380	0.996	0.990
370	0.996	0.989
365	0.994	0.986
350	0.988	0.971
334	0.963	0.910
320	0.867	0.700
310	0.693	0.400
300	0.398	0.100
290	0.158	
280	0.040	
270		
260		
250		

Color Code

λ_{80}/λ_5	32/28
(*= λ_{70}/λ_5)	

Remarks

Relative Partial Dispersion

$P_{s,t}$	0.2810
$P_{C,s}$	0.5382
$P_{d,C}$	0.3042
$P_{e,d}$	0.2385
$P_{g,F}$	0.5437
$P_{i,h}$	0.7695
$P'_{s,t}$	0.2787
$P'_{C',s}$	0.5817
$P'_{d,C'}$	0.2536
$P'_{e,d}$	0.2364
$P'_{g,F'}$	0.4826
$P'_{i,h}$	0.7630

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

$\Delta P_{C,t}$	-0.0089
$\Delta P_{C,s}$	-0.0039
$\Delta P_{F,e}$	0.0004
$\Delta P_{g,F}$	0.0004
$\Delta P_{i,g}$	-0.0027

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.0
T_g [°C]	554
$T_{10}^{13.0}$ [°C]	550
$T_{10}^{7.6}$ [°C]	727
c_p [J/(g·K)]	0.690
λ [W/(m·K)]	0.920
ρ [g/cm^3]	2.86
E [10^3 N/mm^2]	71
µ	0.233
K [10^{-6} mm^2/N]	2.60
HK$_{0.1/20}$	530
HG	2
CR	2
FR	0
SR	1
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	1.1	1.8	2.3	-0.9	-0.3	0.2
+20/ +40	1.0	1.7	2.3	-0.3	0.3	0.9
+60/ +80	1.1	1.8	2.4	0.1	0.8	1.4