

Data Sheet

SCHOTT

N-BAK1
573576.319

$n_d = 1.57250$	$v_d = 57.55$	$n_F - n_C = 0.009948$
$n_e = 1.57487$	$v_e = 57.27$	$n_F - n_C = 0.010039$

Refractive Indices		
	λ [nm]	
$n_{2325.4}$	2325.4	1.54556
$n_{1970.1}$	1970.1	1.55032
$n_{1529.6}$	1529.6	1.55543
$n_{1060.0}$	1060.0	1.56088
n_t	1014.0	1.56152
n_s	852.1	1.56421
n_r	706.5	1.56778
n_c	656.3	1.56949
$n_{c'}$	643.8	1.56997
$n_{632.8}$	632.8	1.57041
n_d	589.3	1.57241
n_e	587.6	1.57250
n_f	546.1	1.57487
$n_{f'}$	486.1	1.57943
$n_{g'}$	480.0	1.58000
n_g	435.8	1.58488
n_h	404.7	1.58941
n_i	365.0	1.59716
$n_{334.1}$	334.1	1.60554
$n_{312.6}$	312.6	1.61326
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Internal Transmittance τ_i		
λ [nm]	τ_i (10mm)	τ_i (25mm)
2500	0.806	0.584
2325	0.877	0.721
1970	0.960	0.903
1530	0.994	0.986
1060	0.998	0.996
700	0.999	0.997
660	0.998	0.995
620	0.998	0.995
580	0.998	0.995
546	0.998	0.995
500	0.997	0.992
460	0.996	0.990
436	0.996	0.989
420	0.996	0.990
405	0.996	0.990
400	0.996	0.990
390	0.995	0.988
380	0.993	0.983
370	0.991	0.977
365	0.987	0.969
350	0.971	0.930
334	0.924	0.820
320	0.799	0.570
310	0.609	0.290
300	0.345	0.070
290	0.102	
280	0.014	
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2712
$P_{C,s}$	0.5301
$P_{d,C}$	0.3029
$P_{e,d}$	0.2384
$P_{g,F}$	0.5472
$P_{i,h}$	0.7788
$P'_{s,t}$	0.2687
$P'_{C,s}$	0.5730
$P'_{d,C}$	0.2525
$P'_{e,d}$	0.2362
$P'_{g,F}$	0.4855
$P'_{i,h}$	0.7717

Deviation of Relative Partial Dispersions ΔP from the "Normal Line"	
$\Delta P_{C,t}$	-0.0167
$\Delta P_{C,s}$	-0.0069
$\Delta P_{F,e}$	0.0006
$\Delta P_{g,F}$	0.0002
$\Delta P_{i,g}$	-0.0075

Other Properties	
$\alpha_{-30/+70^\circ\text{C}} [10^{-6}/\text{K}]$	7.6
$\alpha_{+20/+300^\circ\text{C}} [10^{-6}/\text{K}]$	8.6
$T_g [\text{ }^\circ\text{C}]$	592
$T_{10}^{13.0} [\text{ }^\circ\text{C}]$	592
$T_{10}^{7.6} [\text{ }^\circ\text{C}]$	746
$c_p [\text{J/(g}\cdot\text{K})]$	0.687
$\lambda [\text{W}/(\text{m}\cdot\text{K})]$	0.795
$\rho [\text{g}/\text{cm}^3]$	3.19
$E [10^3 \text{ N/mm}^2]$	73
μ	0.252
$K [10^{-6} \text{ mm}^2/\text{N}]$	2.62
$HK_{0.1/20}$	530
HG	2
B	1
CR	2
FR	1
SR	3.3
AR	1.2
PR	2

Constants of Dispersion Formula		
B_1	1.12365662	
B_2	0.309276848	
B_3	0.881511957	
C_1	0.00644742752	
C_2	0.0222284402	
C_3	107.297751	

Color Code	
λ_{80}/λ_5	33/29
($= \lambda_{70}/\lambda_5$)	

Remarks	

Temperature Coefficients of Refractive Index						
	$\Delta n_{\text{rel}}/\Delta T [10^{-6}/\text{K}]$		$\Delta n_{\text{abs}}/\Delta T [10^{-6}/\text{K}]$			
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	1.7	2.4	3.0	-0.4	0.2	0.8
+20/+40	1.8	2.5	3.2	0.4	1.2	1.8
+60/+80	1.9	2.7	3.5	0.9	1.7	2.4