

Data Sheet

SCHOTT

N-SK4
613586.354

$n_d = 1.61272$	$v_d = 58.63$	$n_F - n_C = 0.010450$
$n_e = 1.61521$	$v_e = 58.37$	$n_F - n_C = 0.010541$

Refractive Indices		
	λ [nm]	
$n_{2325.4}$	2325.4	1.58282
$n_{1970.1}$	1970.1	1.58835
$n_{1529.6}$	1529.6	1.59422
$n_{1060.0}$	1060.0	1.60032
n_t	1014.0	1.60102
n_s	852.1	1.60393
n_r	706.5	1.60774
n_c	656.3	1.60954
$n_{c'}$	643.8	1.61005
$n_{632.8}$	632.8	1.61052
n_d	587.6	1.61272
n_e	546.1	1.61521
n_f	486.1	1.61999
$n_{f'}$	480.0	1.62059
n_g	435.8	1.62568
n_h	404.7	1.63042
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	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	0.686	0.390
2325	0.826	0.620
1970	0.959	0.900
1530	0.991	0.977
1060	0.997	0.993
700	0.998	0.996
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	0.994	0.985
436	0.993	0.983
420	0.993	0.983
405	0.992	0.979
400	0.990	0.975
390	0.984	0.960
380	0.971	0.930
370	0.946	0.870
365	0.928	0.830
350	0.821	0.610
334	0.525	0.200
320	0.102	
310		
300		
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2792
$P_{C,s}$	0.5366
$P_{d,C}$	0.3039
$P_{e,d}$	0.2384
$P_{g,F}$	0.5448
$P_{i,h}$	
$P'_{s,t}$	0.2768
$P'_{C,s}$	0.5799
$P'_{d,C}$	0.2533
$P'_{e,d}$	0.2364
$P'_{g,F}$	0.4835
$P'_{i,h}$	

Deviation of Relative Partial Dispersions ΔP from the "Normal Line"	
$\Delta P_{C,t}$	-0.0073
$\Delta P_{C,s}$	-0.0030
$\Delta P_{F,e}$	0.0001
$\Delta P_{g,F}$	-0.0004
$\Delta P_{i,g}$	

Other Properties	
$\alpha_{-30/+70^\circ\text{C}} [10^{-6}/\text{K}]$	6.5
$\alpha_{+20/+300^\circ\text{C}} [10^{-6}/\text{K}]$	7.4
$T_g [\text{ }^\circ\text{C}]$	658
$T_{10}^{13.0} [\text{ }^\circ\text{C}]$	646
$T_{10}^{7.6} [\text{ }^\circ\text{C}]$	769
$c_p [\text{J/(g}\cdot\text{K})]$	0.570
$\lambda [\text{W}/(\text{m}\cdot\text{K})]$	0.830
$\rho [\text{g}/\text{cm}^3]$	3.54
$E [10^3 \text{ N/mm}^2]$	84
μ	0.261
$K [10^{-6} \text{ mm}^2/\text{N}]$	1.92
$HK_{0.1/20}$	580
HG	3
B	1
CR	3
FR	1
SR	51.2
AR	2
PR	2

Constants of Dispersion Formula		
B_1	1.32993741	
B_2	0.228542996	
B_3	0.988465211	
C_1	0.00716874107	
C_2	0.0246455892	
C_3	100.886364	

Color Code	
λ_{80}/λ_5	36/32
($= \lambda_{70}/\lambda_5$)	

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	2.0	2.6	3.1	-0.1	0.4	0.9
+20/ +40	2.1	2.8	3.4	0.7	1.4	2.0
+60/ +80	2.3	3.0	3.7	1.2	1.9	2.6