

# Data Sheet

SCHOTT

**N-SK14**  
**603606.344**

$n_d = 1.60311$	$v_d = 60.60$	$n_F - n_C = 0.009953$
$n_e = 1.60548$	$v_e = 60.34$	$n_{F'} - n_{C'} = 0.010034$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.57336
$n_{1970.1}$	1970.1	1.57903
$n_{1529.6}$	1529.6	1.58502
$n_{1060.0}$	1060.0	1.59113
$n_t$	1014.0	1.59182
$n_s$	852.1	1.59467
$n_r$	706.5	1.59834
$n_c$	656.3	1.60008
$n_{c'}$	643.8	1.60056
$n_{632.8}$	632.8	1.60101
$n_d$	587.6	1.60311
$n_e$	546.1	1.60548
$n_f$	486.1	1.61003
$n_{f'}$	480.0	1.61059
$n_g$	435.8	1.61542
$n_h$	404.7	1.61988
$n_i$	365.0	1.62748
$n_{334.1}$	334.1	1.63564
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Internal Transmittance $\tau_i$		
$\lambda$ [nm]	$\tau_i$ (10mm)	$\tau_i$ (25mm)
2500	0.679	0.380
2325	0.831	0.630
1970	0.959	0.900
1530	0.992	0.980
1060	0.998	0.994
700	0.998	0.995
660	0.998	0.995
620	0.998	0.995
580	0.998	0.995
546	0.998	0.995
500	0.997	0.993
460	0.995	0.988
436	0.994	0.985
420	0.993	0.983
405	0.991	0.978
400	0.990	0.975
390	0.988	0.970
380	0.981	0.952
370	0.971	0.930
365	0.963	0.910
350	0.910	0.790
334	0.770	0.520
320	0.546	0.220
310	0.345	0.070
300	0.160	
290	0.040	
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2864
$P_{C,s}$	0.5427
$P_{d,C}$	0.3049
$P_{e,d}$	0.2385
$P_{g,F}$	0.5415
$P_{i,h}$	0.7631
$P'_{s,t}$	0.2841
$P'_{C,s}$	0.5865
$P'_{d,C}$	0.2542
$P'_{e,d}$	0.2366
$P'_{g,F}$	0.4808
$P'_{i,h}$	0.7569

Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"	
$\Delta P_{C,t}$	-0.0033
$\Delta P_{C,s}$	-0.0015
$\Delta P_{F,e}$	0.0000
$\Delta P_{g,F}$	-0.0003
$\Delta P_{i,g}$	-0.0044

Other Properties	
$\alpha_{-30/+70^\circ\text{C}} [10^{-6}/\text{K}]$	6.0
$\alpha_{+20/+300^\circ\text{C}} [10^{-6}/\text{K}]$	7.3
$T_g [\text{ }^\circ\text{C}]$	649
$T_{10}^{13.0} [\text{ }^\circ\text{C}]$	638
$T_{10}^{7.6} [\text{ }^\circ\text{C}]$	773
$c_p [\text{J/(g}\cdot\text{K})]$	0.636
$\lambda [\text{W}/(\text{m}\cdot\text{K})]$	0.851
$\rho [\text{g}/\text{cm}^3]$	3.44
$E [10^3 \text{ N/mm}^2]$	86
$\mu$	0.261
$K [10^{-6} \text{ mm}^2/\text{N}]$	2.00
$HK_{0.1/20}$	600
$HG$	3
$B$	1
$CR$	4
$FR$	2
$SR$	51.3
$AR$	2
$PR$	2.3

Constants of Dispersion Formula		
$B_1$	0.936155374	
$B_2$	0.594052018	
$B_3$	1.04374583	
$C_1$	0.00461716525	
$C_2$	0.016885927	
$C_3$	103.736265	

Color Code	
$\lambda_{80}/\lambda_5$	35/29
( $= \lambda_{70}/\lambda_5$ )	

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	2.5	3.0	3.5	0.3	0.8	1.3
+20/+40	2.4	3.1	3.7	1.1	1.7	2.3
+60/+80	2.6	3.3	4.0	1.5	2.2	2.8