Data Sheet

SCHOTT

N-BALF5
547536.261

$n_d = 1.54739$	$\nu_d = 53.63$	$n_F - n_C = 0.010207$
$n_e = 1.54982$	$\nu_e = 53.36$	$n_{F'} - n_{C'} = 0.010303$

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	
$n_{1970.1}$	1970.1	
$n_{1529.6}$	1529.6	
$n_{1060.0}$	1060.0	1.53529
n_t	1014.0	1.53598
n_s	852.1	1.53885
n_r	706.5	1.54255
n_C	656.3	1.54430
$n_{C'}$	643.8	1.54479
$n_{632.8}$	632.8	1.54525
n_D	589.3	1.54730
n_d	587.6	1.54739
n_e	546.1	1.54982
n_F	486.1	1.55451
$n_{F'}$	480.0	1.55510
n_g	435.8	1.56016
n_h	404.7	1.56491
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	

Constants of Dispersion Formula

B_1	1.28385965
B_2	0.0719300942
B_3	1.05048927
C_1	0.00825815975
C_2	0.0441920027
C_3	107.097324

Constants of Dispersion dn/dT

D_0	$1.14 \cdot 10^{-6}$
D_1	$1.29 \cdot 10^{-8}$
D_2	$-1.46 \cdot 10^{-11}$
E_0	$5.02 \cdot 10^{-7}$
E_1	$5.87 \cdot 10^{-10}$
λ_{TK} [µm]	0.219

Internal Transmittance τ_i

λ [nm]	τ_i (10mm)	τ_i (25mm)
2500	0.618	0.300
2325	0.758	0.500
1970	0.919	0.810
1530	0.989	0.973
1060	0.996	0.991
700	0.998	0.995
660	0.997	0.993
620	0.997	0.993
580	0.998	0.995
546	0.998	0.995
500	0.997	0.992
460	0.995	0.988
436	0.994	0.984
420	0.991	0.978
405	0.986	0.965
400	0.983	0.957
390	0.967	0.920
380	0.937	0.850
370	0.872	0.710
365	0.815	0.600
350	0.439	0.128
334	0.006	
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ_{80}/λ_5	37/34
(*= λ_{70}/λ_5)	

Remarks

Relative Partial Dispersion

$P_{s,t}$	0.2810
$P_{C,s}$	0.5345
$P_{d,C}$	0.3025
$P_{e,d}$	0.2380
$P_{g,F}$	0.5532
$P_{i,h}$	
$P'_{s,t}$	0.2783
$P'_{C',s}$	0.5771
$P'_{d,C'}$	0.2520
$P'_{e,d}$	0.2357
$P'_{g,F'}$	0.4909
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0161
$\Delta P_{C,s}$	0.0066
$\Delta P_{F,e}$	-0.0007
$\Delta P_{g,F}$	-0.0004
$\Delta P_{i,g}$	

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.4
T_g [°C]	558
$T_{10}^{13.0}$ [°C]	559
$T_{10}^{7.6}$ [°C]	711
c_p [J/(g·K)]	0.810
λ [W/(m·K)]	1.050
ρ [g/cm^3]	2.61
E [10^3 N/mm^2]	81
μ	0.214
K [10^{-6} mm^2/N]	2.76
HK$_{0.1/20}$	600
HG	2
CR	1
FR	0
SR	1
AR	2
PR	1

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	2.1	2.8	3.5	0.1	0.7	1.3
+20/ +40	2.1	2.9	3.7	0.8	1.6	2.3
+60/ +80	2.3	3.1	3.9	1.3	2.1	2.9