Datasheet

SCHOTT
glass made of ideas

N-F2
620364.265

n_d = 1.62005	ν_d = 36.43	$n_F - n_C$ = 0.017020
n_e = 1.62408	ν_e = 36.16	$n_{F'} - n_{C'}$ = 0.017258

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.58136
$n_{1970.1}$	1970.1	1.58744
$n_{1529.6}$	1529.6	1.59410
$n_{1060.0}$	1060.0	1.60167
n_t	1014.0	1.60261
n_s	852.1	1.60667
n_r	706.5	1.61229
n_C	656.3	1.61506
$n_{C'}$	643.8	1.61584
$n_{632.8}$	632.8	1.61658
n_D	589.3	1.61990
n_d	587.6	1.62005
n_e	546.1	1.62408
n_F	486.1	1.63208
$n_{F'}$	480.0	1.63310
n_g	435.8	1.64209
n_h	404.7	1.65087
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	1.397570370
B_2	0.159201403
B_3	1.268654300
C_1	0.009959061
C_2	0.0546931752
C_3	119.24834600

Constants of Formula for dn/dT

D_0	4.62E-07
D_1	1.17E-08
D_2	-2.35E-11
E_0	7.47E-07
E_1	9.81E-10
λ_{TK} [µm]	0.263

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.75	0.48
2325	0.84	0.64
1970	0.950	0.88
1530	0.991	0.977
1060	0.998	0.996
700	0.997	0.992
660	0.996	0.990
620	0.996	0.991
580	0.997	0.993
546	0.997	0.992
500	0.994	0.984
460	0.989	0.973
436	0.985	0.963
420	0.980	0.950
405	0.959	0.90
400	0.95	0.87
390	0.89	0.75
380	0.76	0.51
370	0.48	0.16
365	0.28	0.04
350	0.10	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	39/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2389
$P_{C,s}$	0.4925
$P_{d,C}$	0.2935
$P_{e,d}$	0.2366
$P_{g,F}$	0.5881
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2356
$P'_{C',s}$	0.5312
$P'_{d,C'}$	0.2440
$P'_{e,d}$	0.2334
$P'_{g,F'}$	0.5208
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0137
$\Delta P_{C,s}$	0.0047
$\Delta P_{F,e}$	0.0006
$\Delta P_{g,F}$	0.0056
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.1
T_g [°C]	569
$T_{10^{13}}$ [°C]	567
$T_{10^{7.6}}$ [°C]	686
c_p [J/(g*K)]	0.810
λ [W/(m•K)]	1.050
ρ [g/cm³]	2.65
E [10^3 N/mm²]	82
µ	0.228
K [10^{-6} mm²/N]	3.03
$HK_{0.1/20}$	600
HG	2

Temperature Coefficients of the 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	2.0	3.2	4.6	-0.1	1.0	2.3
+20/+40	2.1	3.5	5.1	0.7	2.0	3.6
+60/+80	2.2	3.7	5.5	1.1	2.6	4.4