

SF6HT 805254.518

$n_d = 1.80518$

$v_d = 25.43$

$n_F - n_C = 0.031660$

$n_e = 1.81265$

$v_e = 25.24$

$n_F - n_C = 0.032201$

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.75302
$n_{1970.1}$	1970.1	1.75813
$n_{1529.6}$	1529.6	1.76444
$n_{1060.0}$	1060.0	1.77380
n_t	1014.0	1.77517
n_s	852.1	1.78157
n_r	706.5	1.79117
n_C	656.3	1.79609
$n_{C'}$	643.8	1.79750
$n_{632.8}$	632.8	1.79884
n_D	589.3	1.80491
n_d	587.6	1.80518
n_e	546.1	1.81265
n_F	486.1	1.82775
$n_{F'}$	480.0	1.82970
n_g	435.8	1.84707
n_h	404.7	1.86436
n_i	365.0	1.89703
$n_{334.1}$	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	1.724484820
B_2	0.390104889
B_3	1.045728580
C_1	0.013487195
C_2	0.0569318095
C_3	118.55718500

Constants of Formula for dn/dT

D_0	6.69E-06
D_1	1.78E-08
D_2	-3.36E-11
E_0	1.77E-06
E_1	1.70E-09
λ_{TK} [μm]	0.269

Temperature Coefficients of the Refractive Index

[°C]	$\Delta n_{rel}/\Delta T$ [$10^{-6}/K$]			$\Delta n_{abs}/\Delta T$ [$10^{-6}/K$]		
	1060.0	e	g	1060.0	e	g
-40/-20	6.1	9.9	14.5	3.7	7.4	11.9
+20/+40	6.8	11.1	16.2	5.3	9.5	14.6
+60/+80	7.3	11.8	17.4	6.1	10.6	16.1

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.890	0.740
2325	0.910	0.790
1970	0.971	0.930
1530	0.996	0.991
1060	0.999	0.999
700	0.999	0.997
660	0.998	0.996
620	0.998	0.995
580	0.999	0.996
546	0.998	0.996
500	0.996	0.991
460	0.992	0.981
436	0.987	0.967
420	0.977	0.940
405	0.954	0.890
400	0.940	0.860
390	0.890	0.750
380	0.770	0.520
370	0.500	0.180
365	0.300	0.050
350	0.000	0.000
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

$\lambda_{80} / \lambda_{5}$ 41/36

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2020
$P_{C,s}$	0.4588
$P_{d,C}$	0.2871
$P_{e,d}$	0.2359
$P_{g,F}$	0.6102
$P_{i,h}$	1.0316
Relative Partial Dispersion P'	
$P'_{s,t}$	0.1986
$P'_{C,s}$	0.4950
$P'_{d,C'}$	0.2384
$P'_{e,d}$	0.2319
$P'_{g,F'}$	0.5393
$P'_{i,h}$	1.0143

Deviation of Rel. Partial Disp.

ΔP from the normal line

$\Delta P_{C,t}$	-0.0048
$\Delta P_{C,s}$	-0.0033
$\Delta P_{F,e}$	0.0020
$\Delta P_{g,F}$	0.0092
$\Delta P_{i,g}$	0.0669

Chemical Properties

CR	2
FR	3
SR	51.3
AR	2.3
PR	3.3

Other Properties

$\alpha_{-30/+70^\circ\text{C}}$ [$10^{-6}/K$]	8.1
$\alpha_{+20/+300^\circ\text{C}}$ [$10^{-6}/K$]	9.0
T_g [°C]	423
T_{10}^{13} [°C]	410
$T_{10}^{7.6}$ [°C]	538
c_p [J/(g·K)]	0.389
λ [W/(m·K)]	0.673
ρ [g/cm ³]	5.18
E [10^3 N/mm ²]	55
μ	0.244
K [10^{-6} mm ² /N]	0.65
$HK_{0.1/20}$	370
HG	1