Оптическое стекло SF, KZFS

Технические характеристики

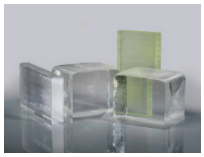
По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70
Казахстан +(727)345-47-04
Беларусь +(375)257-127-884
Узбекистан +998(71)205-18-59
Киргизия +996(312)96-26-47

эл.почта: sqh@nt-rt.ru || сайт: https://schott.nt-rt.ru/

Datasheet



N-SF1
717296.303

n_d = 1.71736	ν_d = 29.62	$n_F - n_C$ = 0.024219
n_e = 1.72308	ν_e = 29.39	$n_{F'} - n_{C'}$ = 0.024606

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.67021
$n_{1970.1}$	1970.1	1.67641
$n_{1529.6}$	1529.6	1.68350
$n_{1060.0}$	1060.0	1.69240
n_t	1014.0	1.69358
n_s	852.1	1.69889
n_r	706.5	1.70651
n_C	656.3	1.71035
$n_{C'}$	643.8	1.71144
$n_{632.8}$	632.8	1.71247
n_D	589.3	1.71715
n_d	587.6	1.71736
n_e	546.1	1.72308
n_F	486.1	1.73457
$n_{F'}$	480.0	1.73605
n_g	435.8	1.74919
n_h	404.7	1.76224
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	1.608651580
B_2	0.237725916
B_3	1.515306530
C_1	0.011965488
C_2	0.0590589722
C_3	135.52167600

Constants of Formula for dn/dT

D_0	-3.72E-06
D_1	8.05E-09
D_2	-1.71E-11
E_0	8.98E-07
E_1	1.34E-09
λ_{TK} [µm]	0.276

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.730	0.460
2325	0.800	0.580
1970	0.940	0.850
1530	0.989	0.973
1060	0.998	0.995
700	0.996	0.990
660	0.994	0.986
620	0.995	0.987
580	0.996	0.990
546	0.994	0.986
500	0.987	0.968
460	0.976	0.940
436	0.963	0.910
420	0.950	0.870
405	0.900	0.760
400	0.870	0.700
390	0.770	0.520
380	0.570	0.250
370	0.250	0.030
365	0.100	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	41/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2190
$P_{C,s}$	0.4733
$P_{d,C}$	0.2895
$P_{e,d}$	0.2360
$P_{g,F}$	0.6037
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2156
$P'_{C',s}$	0.5103
$P'_{d,C'}$	0.2405
$P'_{e,d}$	0.2323
$P'_{g,F'}$	0.5340
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0068
$\Delta P_{C,s}$	0.0013
$\Delta P_{F,e}$	0.0016
$\Delta P_{g,F}$	0.0097
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.5
T_g [°C]	553
$T_{10^{13}}$ [°C]	554
$T_{10^{7.6}}$ [°C]	660
c_p [J/(g*K)]	0.750
λ [W/(m•K)]	1.000
ρ [g/cm³]	3.03
E [10^3 N/mm²]	90
µ	0.250
K [10^{-6} mm²/N]	2.72
$HK_{0.1/20}$	540
HG	5

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	0.1	1.7	3.6	-2.2	-0.7	1.2
+20/+40	0.0	1.8	4.2	-1.5	0.3	2.7
+60/+80	0.0	2.1	4.8	-1.1	0.9	3.5

Datasheet

SCHOTT
glass made of ideas

N-SF2
648338.272

n_d = 1.64769	ν_d = 33.82	$n_F - n_C$ = 0.019151
n_e = 1.65222	ν_e = 33.56	$n_{F'} - n_{C'}$ = 0.019435

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.60661
$n_{1970.1}$	1970.1	1.61268
$n_{1529.6}$	1529.6	1.61944
$n_{1060.0}$	1060.0	1.62738
n_t	1014.0	1.62839
n_s	852.1	1.63282
n_r	706.5	1.63902
n_C	656.3	1.64210
$n_{C'}$	643.8	1.64298
$n_{632.8}$	632.8	1.64380
n_D	589.3	1.64752
n_d	587.6	1.64769
n_e	546.1	1.65222
n_F	486.1	1.66125
$n_{F'}$	480.0	1.66241
n_g	435.8	1.67265
n_h	404.7	1.68273
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	1.473431270
B_2	0.163681849
B_3	1.369208990
C_1	0.010901910
C_2	0.0585683687
C_3	127.40493300

Constants of Formula for dn/dT

D_0	3.10E-06
D_1	1.75E-08
D_2	6.62E-11
E_0	7.51E-07
E_1	8.99E-10
λ_{TK} [µm]	0.277

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.850	0.670
2325	0.900	0.760
1970	0.971	0.930
1530	0.994	0.984
1060	0.999	0.997
700	0.995	0.987
660	0.994	0.984
620	0.994	0.984
580	0.995	0.987
546	0.994	0.986
500	0.990	0.975
460	0.984	0.961
436	0.979	0.950
420	0.970	0.930
405	0.940	0.870
400	0.930	0.830
390	0.860	0.680
380	0.690	0.400
370	0.330	0.060
365	0.130	0.010
350	0.000	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	40/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2311
$P_{C,s}$	0.4848
$P_{d,C}$	0.2918
$P_{e,d}$	0.2364
$P_{g,F}$	0.5950
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2277
$P'_{C',s}$	0.5228
$P'_{d,C'}$	0.2425
$P'_{e,d}$	0.2329
$P'_{g,F'}$	0.5267
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0106
$\Delta P_{C,s}$	0.0031
$\Delta P_{F,e}$	0.0012
$\Delta P_{g,F}$	0.0081
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1.2
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.7
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.8
T_g [°C]	608
$T_{10^{13}}$ [°C]	607
$T_{10^{7.6}}$ [°C]	731
c_p [J/(g*K)]	0.790
λ [W/(m•K)]	1.140
ρ [g/cm³]	2.72
E [10^3 N/mm²]	86
µ	0.231
K [10^{-6} mm²/N]	3.06
$HK_{0.1/20}$	539

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	3.4	4.8	6.4	1.3	2.5	4.1
+20/+40	3.5	5.1	7.0	2.1	3.6	5.5
+60/+80	4.2	5.9	8.0	3.1	4.8	6.9

Datasheet

SCHOTT
glass made of ideas

N-SF4
755274.315

n_d = 1.75513	ν_d = 27.38	$n_F - n_C$ = 0.027583
n_e = 1.76164	ν_e = 27.16	$n_{F'} - n_{C'}$ = 0.028044

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.70434
$n_{1970.1}$	1970.1	1.71052
$n_{1529.6}$	1529.6	1.71773
$n_{1060.0}$	1060.0	1.72717
n_t	1014.0	1.72846
n_s	852.1	1.73432
n_r	706.5	1.74286
n_C	656.3	1.74719
$n_{C'}$	643.8	1.74842
$n_{632.8}$	632.8	1.74959
n_D	589.3	1.75489
n_d	587.6	1.75513
n_e	546.1	1.76164
n_F	486.1	1.77477
$n_{F'}$	480.0	1.77647
n_g	435.8	1.79158
n_h	404.7	1.80668
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	1.677802820
B_2	0.282849893
B_3	1.635392760
C_1	0.012679345
C_2	0.0602038419
C_3	145.76049600

Constants of Formula for dn/dT

D_0	-4.88E-06
D_1	6.57E-09
D_2	-2.72E-11
E_0	9.67E-07
E_1	1.48E-09
λ_{TK} [µm]	0.282

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.780	0.530
2325	0.820	0.600
1970	0.940	0.860
1530	0.992	0.980
1060	0.999	0.999
700	0.994	0.984
660	0.991	0.978
620	0.992	0.979
580	0.993	0.982
546	0.991	0.977
500	0.979	0.950
460	0.961	0.910
436	0.940	0.860
420	0.920	0.800
405	0.860	0.690
400	0.830	0.630
390	0.740	0.470
380	0.560	0.240
370	0.250	0.030
365	0.100	0.000
350	0.000	0.000
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	43/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2123
$P_{C,s}$	0.4666
$P_{d,C}$	0.2880
$P_{e,d}$	0.2358
$P_{g,F}$	0.6096
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2088
$P'_{C',s}$	0.5030
$P'_{d,C'}$	0.2392
$P'_{e,d}$	0.2319
$P'_{g,F'}$	0.5390
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0040
$\Delta P_{C,s}$	-0.0002
$\Delta P_{F,e}$	0.0022
$\Delta P_{g,F}$	0.0118
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1.3
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.9
T_g [°C]	570
$T_{10^{13}}$ [°C]	559
$T_{10^{7.6}}$ [°C]	661
c_p [J/(g*K)]	0.760
λ [W/(m•K)]	0.950
ρ [g/cm³]	3.15
E [10^3 N/mm²]	90
µ	0.256
K [10^{-6} mm²/N]	2.76
$HK_{0.1/20}$	520
HG	6

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	-0.5	1.2	3.5	-2.9	-1.2	1.0
+20/+40	-0.7	1.4	4.2	-2.2	-0.1	2.6
+60/+80	-0.8	1.6	4.7	-1.9	0.4	3.5

Datasheet

SCHOTT
glass made of ideas

N-SF5
673323.286

n_d = 1.67271	ν_d = 32.25	$n_F - n_C$ = 0.020858
n_e = 1.67763	ν_e = 32.00	$n_{F'} - n_{C'}$ = 0.021177

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.62935
$n_{1970.1}$	1970.1	1.63554
$n_{1529.6}$	1529.6	1.64249
$n_{1060.0}$	1060.0	1.65080
n_t	1014.0	1.65188
n_s	852.1	1.65661
n_r	706.5	1.66330
n_C	656.3	1.66664
$n_{C'}$	643.8	1.66759
$n_{632.8}$	632.8	1.66848
n_D	589.3	1.67253
n_d	587.6	1.67271
n_e	546.1	1.67763
n_F	486.1	1.68750
$n_{F'}$	480.0	1.68876
n_g	435.8	1.69998
n_h	404.7	1.71106
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	1.524818890
B_2	0.187085527
B_3	1.427290150
C_1	0.011254756
C_2	0.0588995392
C_3	129.14167500

Constants of Formula for dn/dT

D_0	-2.51E-07
D_1	1.07E-08
D_2	-2.40E-11
E_0	7.85E-07
E_1	1.15E-09
λ_{TK} [µm]	0.278

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.760	0.500
2325	0.830	0.630
1970	0.950	0.880
1530	0.990	0.975
1060	0.998	0.994
700	0.996	0.989
660	0.995	0.987
620	0.995	0.988
580	0.996	0.991
546	0.995	0.988
500	0.990	0.976
460	0.982	0.956
436	0.973	0.940
420	0.963	0.910
405	0.930	0.830
400	0.910	0.780
390	0.830	0.620
380	0.640	0.330
370	0.280	0.040
365	0.120	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	40/36

Remarks

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2270
$P_{C,s}$	0.4807
$P_{d,C}$	0.2910
$P_{e,d}$	0.2362
$P_{g,F}$	0.5984
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2236
$P'_{C',s}$	0.5184
$P'_{d,C'}$	0.2418
$P'_{e,d}$	0.2327
$P'_{g,F'}$	0.5295
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0097
$\Delta P_{C,s}$	0.0027
$\Delta P_{F,e}$	0.0014
$\Delta P_{g,F}$	0.0088
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.9
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.2
T_g [°C]	578
$T_{10^{13}}$ [°C]	576
$T_{10^{7.6}}$ [°C]	693
c_p [J/(g*K)]	0.770
λ [W/(m•K)]	1.000
ρ [g/cm³]	2.86
E [10^3 N/mm²]	87
µ	0.237
K [10^{-6} mm²/N]	2.99
$HK_{0.1/20}$	620
HG	3

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	1.8	3.1	4.8	-0.5	0.8	2.5
+20/+40	1.8	3.4	5.5	0.4	2.0	4.0
+60/+80	1.9	3.7	6.0	0.8	2.5	4.8

Datasheet

SCHOTT
glass made of ideas

N-SF6
805254.337

n_d = 1.80518	ν_d = 25.36	$n_F - n_C$ = 0.031750
n_e = 1.81266	ν_e = 25.16	$n_{F'} - n_{C'}$ = 0.032304

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.74895
$n_{1970.1}$	1970.1	1.75541
$n_{1529.6}$	1529.6	1.76307
$n_{1060.0}$	1060.0	1.77341
n_t	1014.0	1.77486
n_s	852.1	1.78144
n_r	706.5	1.79114
n_C	656.3	1.79608
$n_{C'}$	643.8	1.79749
$n_{632.8}$	632.8	1.79883
n_D	589.3	1.80491
n_d	587.6	1.80518
n_e	546.1	1.81266
n_F	486.1	1.82783
$n_{F'}$	480.0	1.82980
n_g	435.8	1.84738
n_h	404.7	1.86506
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	1.779317630
B_2	0.338149866
B_3	2.087344740
C_1	0.013371418
C_2	0.0617533621
C_3	174.01759000

Constants of Formula for dn/dT

D_0	-4.93E-06
D_1	7.02E-09
D_2	-2.40E-11
E_0	9.84E-07
E_1	1.54E-09
λ_{TK} [µm]	0.290

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.780	0.530
2325	0.810	0.590
1970	0.940	0.860
1530	0.991	0.978
1060	0.998	0.996
700	0.993	0.983
660	0.990	0.976
620	0.991	0.978
580	0.992	0.980
546	0.989	0.972
500	0.977	0.940
460	0.961	0.910
436	0.950	0.870
420	0.920	0.810
405	0.860	0.680
400	0.820	0.610
390	0.700	0.410
380	0.480	0.160
370	0.160	0.010
365	0.000	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	45/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2074
$P_{C,s}$	0.4610
$P_{d,C}$	0.2867
$P_{e,d}$	0.2356
$P_{g,F}$	0.6158
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2039
$P'_{C',s}$	0.4969
$P'_{d,C'}$	0.2380
$P'_{e,d}$	0.2315
$P'_{g,F'}$	0.5443
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0031
$\Delta P_{C,s}$	-0.0010
$\Delta P_{F,e}$	0.0027
$\Delta P_{g,F}$	0.0146
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	2
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.3
T_g [°C]	589
$T_{10^{13}}$ [°C]	593
$T_{10^{7.6}}$ [°C]	669
c_p [J/(g*K)]	0.690
λ [W/(m•K)]	0.960
ρ [g/cm^3]	3.37
E [10^3 N/mm^2]	93
µ	0.262
K [10^{-6} mm^2/N]	2.82
$HK_{0.1/20}$	550
HG	4

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	-0.7	1.2	3.9	-3.0	-1.2	1.3
+20/+40	-0.8	1.5	4.8	-2.3	0.0	3.1
+60/+80	-0.8	1.8	5.4	-2.0	0.6	4.1

Datasheet

SCHOTT
glass made of ideas

N-SF6HT
805254.337

n_d = 1.80518	ν_d = 25.36	$n_F - n_C$ = 0.031750
n_e = 1.81266	ν_e = 25.16	$n_{F'} - n_{C'}$ = 0.032304

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.74895
$n_{1970.1}$	1970.1	1.75541
$n_{1529.6}$	1529.6	1.76307
$n_{1060.0}$	1060.0	1.77341
n_t	1014.0	1.77486
n_s	852.1	1.78144
n_r	706.5	1.79114
n_C	656.3	1.79608
$n_{C'}$	643.8	1.79749
$n_{632.8}$	632.8	1.79883
n_D	589.3	1.80491
n_d	587.6	1.80518
n_e	546.1	1.81266
n_F	486.1	1.82783
$n_{F'}$	480.0	1.82980
n_g	435.8	1.84738
n_h	404.7	1.86506
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	1.779317630
B_2	0.338149866
B_3	2.087344740
C_1	0.013371418
C_2	0.0617533621
C_3	174.01759000

Constants of Formula for dn/dT

D_0	-4.93E-06
D_1	7.02E-09
D_2	-2.40E-11
E_0	9.84E-07
E_1	1.54E-09
λ_{TK} [µm]	0.290

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.790	0.560
2325	0.830	0.620
1970	0.950	0.870
1530	0.992	0.980
1060	0.999	0.997
700	0.994	0.984
660	0.991	0.977
620	0.992	0.979
580	0.992	0.981
546	0.990	0.975
500	0.980	0.950
460	0.966	0.920
436	0.954	0.890
420	0.940	0.850
405	0.900	0.770
400	0.880	0.720
390	0.790	0.560
380	0.590	0.270
370	0.210	0.020
365	0.000	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	44/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2074
$P_{C,s}$	0.4610
$P_{d,C}$	0.2867
$P_{e,d}$	0.2356
$P_{g,F}$	0.6158
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2039
$P'_{C',s}$	0.4969
$P'_{d,C'}$	0.2380
$P'_{e,d}$	0.2315
$P'_{g,F'}$	0.5443
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0031
$\Delta P_{C,s}$	-0.0010
$\Delta P_{F,e}$	0.0027
$\Delta P_{g,F}$	0.0146
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	2
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.3
T_g [°C]	589
$T_{10^{13}}$ [°C]	593
$T_{10^{7.6}}$ [°C]	669
c_p [J/(g*K)]	0.690
λ [W/(m•K)]	0.960
ρ [g/cm^3]	3.37
E [10^3 N/mm^2]	93
µ	0.262
K [10^{-6} mm^2/N]	2.82
$HK_{0.1/20}$	550
HG	4

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	-0.7	1.2	3.9	-3.0	-1.2	1.3
+20/+40	-0.8	1.5	4.8	-2.3	0.0	3.1
+60/+80	-0.8	1.8	5.4	-2.0	0.6	4.1

Datasheet

SCHOTT
glass made of ideas

N-SF6HTultra
805254.337

n_d = 1.80518	ν_d = 25.36	$n_F - n_C$ = 0.031750
n_e = 1.81266	ν_e = 25.16	$n_{F'} - n_{C'}$ = 0.032304

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.74895
$n_{1970.1}$	1970.1	1.75541
$n_{1529.6}$	1529.6	1.76307
$n_{1060.0}$	1060.0	1.77341
n_t	1014.0	1.77486
n_s	852.1	1.78144
n_r	706.5	1.79114
n_C	656.3	1.79608
$n_{C'}$	643.8	1.79749
$n_{632.8}$	632.8	1.79883
n_D	589.3	1.80491
n_d	587.6	1.80518
n_e	546.1	1.81266
n_F	486.1	1.82783
$n_{F'}$	480.0	1.82980
n_g	435.8	1.84738
n_h	404.7	1.86506
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	1.779317630
B_2	0.338149866
B_3	2.087344740
C_1	0.013371418
C_2	0.0617533621
C_3	174.01759000

Constants of Formula for dn/dT

D_0	-4.93E-06
D_1	7.02E-09
D_2	-2.40E-11
E_0	9.84E-07
E_1	1.54E-09
λ_{TK} [µm]	0.290

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.800	0.570
2325	0.830	0.620
1970	0.950	0.880
1530	0.992	0.981
1060	0.999	0.999
700	0.994	0.984
660	0.991	0.978
620	0.992	0.980
580	0.994	0.984
546	0.992	0.981
500	0.984	0.960
460	0.972	0.930
436	0.961	0.910
420	0.950	0.870
405	0.910	0.790
400	0.890	0.740
390	0.800	0.580
380	0.600	0.280
370	0.220	0.020
365	0.000	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	43/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2074
$P_{C,s}$	0.4610
$P_{d,C}$	0.2867
$P_{e,d}$	0.2356
$P_{g,F}$	0.6158
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2039
$P'_{C',s}$	0.4969
$P'_{d,C'}$	0.2380
$P'_{e,d}$	0.2315
$P'_{g,F'}$	0.5443
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0031
$\Delta P_{C,s}$	-0.0010
$\Delta P_{F,e}$	0.0027
$\Delta P_{g,F}$	0.0146
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	2
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.3
T_g [°C]	589
$T_{10^{13}}$ [°C]	593
$T_{10^{7.6}}$ [°C]	669
c_p [J/(g*K)]	0.690
λ [W/(m•K)]	0.960
ρ [g/cm^3]	3.37
E [10^3 N/mm^2]	93
µ	0.262
K [10^{-6} mm^2/N]	2.82
$HK_{0.1/20}$	550
HG	4

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	-0.7	1.2	3.9	-3.0	-1.2	1.3
+20/+40	-0.8	1.5	4.8	-2.3	0.0	3.1
+60/+80	-0.8	1.8	5.4	-2.0	0.6	4.1

Datasheet

SCHOTT
glass made of ideas

N-SF8
689313.290

n_d = 1.68894	ν_d = 31.31	$n_F - n_C$ = 0.022005
n_e = 1.69413	ν_e = 31.06	$n_{F'} - n_{C'}$ = 0.022346

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.64448
$n_{1970.1}$	1970.1	1.65060
$n_{1529.6}$	1529.6	1.65753
$n_{1060.0}$	1060.0	1.66600
n_t	1014.0	1.66711
n_s	852.1	1.67203
n_r	706.5	1.67904
n_C	656.3	1.68254
$n_{C'}$	643.8	1.68354
$n_{632.8}$	632.8	1.68448
n_D	589.3	1.68874
n_d	587.6	1.68894
n_e	546.1	1.69413
n_F	486.1	1.70455
$n_{F'}$	480.0	1.70589
n_g	435.8	1.71775
n_h	404.7	1.72948
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	1.550758120
B_2	0.209816918
B_3	1.462054910
C_1	0.011433834
C_2	0.0582725652
C_3	133.24165000

Constants of Formula for dn/dT

D_0	-1.94E-06
D_1	9.70E-09
D_2	-2.34E-11
E_0	8.32E-07
E_1	1.15E-09
λ_{TK} [µm]	0.276

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.750	0.480
2325	0.820	0.600
1970	0.950	0.870
1530	0.988	0.970
1060	0.997	0.993
700	0.995	0.987
660	0.993	0.983
620	0.993	0.983
580	0.994	0.986
546	0.993	0.983
500	0.985	0.963
460	0.976	0.940
436	0.965	0.910
420	0.950	0.880
405	0.920	0.810
400	0.900	0.770
390	0.830	0.630
380	0.670	0.370
370	0.350	0.070
365	0.160	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	41/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2236
$P_{C,s}$	0.4778
$P_{d,C}$	0.2905
$P_{e,d}$	0.2362
$P_{g,F}$	0.5999
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2202
$P'_{C',s}$	0.5152
$P'_{d,C'}$	0.2413
$P'_{e,d}$	0.2326
$P'_{g,F'}$	0.5308
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0080
$\Delta P_{C,s}$	0.0019
$\Delta P_{F,e}$	0.0014
$\Delta P_{g,F}$	0.0087
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1
SR-J	1
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.9
T_g [°C]	567
$T_{10^{13}}$ [°C]	564
$T_{10^{7.6}}$ [°C]	678
c_p [J/(g*K)]	0.770
λ [W/(m•K)]	1.030
ρ [g/cm³]	2.90
E [10^3 N/mm²]	88
µ	0.245
K [10^{-6} mm²/N]	2.95
$HK_{0.1/20}$	600
HG	4

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	1.0	2.4	4.2	-1.3	0.1	1.8
+20/+40	0.9	2.6	4.8	-0.5	1.2	3.3
+60/+80	1.0	2.9	5.3	-0.1	1.7	4.1

Datasheet

SCHOTT
glass made of ideas

N-SF10
728285.305

n_d = 1.72828	ν_d = 28.53	$n_F - n_C$ = 0.025524
n_e = 1.73430	ν_e = 28.31	$n_{F'} - n_{C'}$ = 0.025941

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.67981
$n_{1970.1}$	1970.1	1.68597
$n_{1529.6}$	1529.6	1.69308
$n_{1060.0}$	1060.0	1.70217
n_t	1014.0	1.70340
n_s	852.1	1.70891
n_r	706.5	1.71688
n_C	656.3	1.72091
$n_{C'}$	643.8	1.72206
$n_{632.8}$	632.8	1.72314
n_D	589.3	1.72806
n_d	587.6	1.72828
n_e	546.1	1.73430
n_F	486.1	1.74643
$n_{F'}$	480.0	1.74800
n_g	435.8	1.76191
n_h	404.7	1.77578
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	1.621539020
B_2	0.256287842
B_3	1.644475520
C_1	0.012224146
C_2	0.0595736775
C_3	147.46879300

Constants of Formula for dn/dT

D_0	-4.68E-06
D_1	7.41E-09
D_2	-1.89E-11
E_0	9.49E-07
E_1	1.42E-09
λ_{TK} [µm]	0.279

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.850	0.660
2325	0.900	0.760
1970	0.971	0.930
1530	0.994	0.985
1060	0.996	0.990
700	0.993	0.983
660	0.990	0.976
620	0.991	0.977
580	0.991	0.978
546	0.989	0.973
500	0.978	0.950
460	0.963	0.910
436	0.950	0.870
420	0.920	0.820
405	0.870	0.700
400	0.840	0.640
390	0.730	0.450
380	0.530	0.200
370	0.180	
365	0.060	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	42/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2160
$P_{C,s}$	0.4701
$P_{d,C}$	0.2888
$P_{e,d}$	0.2359
$P_{g,F}$	0.6066
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2125
$P'_{C',s}$	0.5068
$P'_{d,C'}$	0.2398
$P'_{e,d}$	0.2321
$P'_{g,F'}$	0.5365
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0057
$\Delta P_{C,s}$	0.0007
$\Delta P_{F,e}$	0.0019
$\Delta P_{g,F}$	0.0108
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.8
T_g [°C]	559
$T_{10^{13}}$ [°C]	549
$T_{10^{7.6}}$ [°C]	652
c_p [J/(g*K)]	0.740
λ [W/(m•K)]	0.960
ρ [g/cm³]	3.05
E [10^3 N/mm²]	87
µ	0.252
K [10^{-6} mm²/N]	2.92
$HK_{0.1/20}$	540
HG	5

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	-0.4	1.3	3.4	-2.7	-1.1	1.0
+20/+40	-0.5	1.5	4.1	-2.0	-0.1	2.5
+60/+80	-0.5	1.7	4.6	-1.7	0.5	3.4

Datasheet

SCHOTT
glass made of ideas

N-SF11
785257.322

n_d = 1.78472	ν_d = 25.68	$n_F - n_C$ = 0.030558
n_e = 1.79192	ν_e = 25.47	$n_{F'} - n_{C'}$ = 0.031088

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.72937
$n_{1970.1}$	1970.1	1.73600
$n_{1529.6}$	1529.6	1.74377
$n_{1060.0}$	1060.0	1.75401
n_t	1014.0	1.75542
n_s	852.1	1.76182
n_r	706.5	1.77119
n_C	656.3	1.77596
$n_{C'}$	643.8	1.77732
$n_{632.8}$	632.8	1.77860
n_D	589.3	1.78446
n_d	587.6	1.78472
n_e	546.1	1.79192
n_F	486.1	1.80651
$n_{F'}$	480.0	1.80841
n_g	435.8	1.82533
n_h	404.7	1.84235
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	1.737596950
B_2	0.313747346
B_3	1.898781010
C_1	0.013188707
C_2	0.0623068142
C_3	155.23629000

Constants of Formula for dn/dT

D_0	-3.56E-06
D_1	9.20E-09
D_2	-2.10E-11
E_0	9.65E-07
E_1	1.44E-09
λ_{TK} [µm]	0.294

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.830	0.620
2325	0.870	0.700
1970	0.965	0.920
1530	0.994	0.985
1060	0.999	0.998
700	0.994	0.985
660	0.992	0.981
620	0.992	0.981
580	0.994	0.984
546	0.991	0.978
500	0.981	0.953
460	0.967	0.920
436	0.950	0.870
420	0.920	0.810
405	0.850	0.670
400	0.820	0.600
390	0.690	0.390
380	0.430	0.120
370	0.080	0.000
365	0.000	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	44/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2095
$P_{C,s}$	0.4625
$P_{d,C}$	0.2868
$P_{e,d}$	0.2355
$P_{g,F}$	0.6156
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2059
$P'_{C',s}$	0.4984
$P'_{d,C'}$	0.2381
$P'_{e,d}$	0.2315
$P'_{g,F'}$	0.5442
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0052
$\Delta P_{C,s}$	-0.0003
$\Delta P_{F,e}$	0.0027
$\Delta P_{g,F}$	0.0150
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.9
T_g [°C]	592
$T_{10^{13}}$ [°C]	590
$T_{10^{7.6}}$ [°C]	688
c_p [J/(g*K)]	0.710
λ [W/(m•K)]	0.950
ρ [g/cm³]	3.22
E [10^3 N/mm²]	92
µ	0.257
K [10^{-6} mm²/N]	2.94
$HK_{0.1/20}$	615
HG	4

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	0.1	2.0	4.6	-2.3	-0.5	2.1
+20/+40	0.1	2.4	5.6	-1.4	0.8	4.0
+60/+80	0.2	2.7	6.3	-1.0	1.5	5.1

Datasheet

SCHOTT
glass made of ideas

N-SF14
762265.312

n_d = 1.76182	ν_d = 26.53	$n_F - n_C$ = 0.028715
n_e = 1.76859	ν_e = 26.32	$n_{F'} - n_{C'}$ = 0.029204

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.70954
$n_{1970.1}$	1970.1	1.71581
$n_{1529.6}$	1529.6	1.72315
$n_{1060.0}$	1060.0	1.73284
n_t	1014.0	1.73417
n_s	852.1	1.74022
n_r	706.5	1.74907
n_C	656.3	1.75356
$n_{C'}$	643.8	1.75485
$n_{632.8}$	632.8	1.75606
n_D	589.3	1.76157
n_d	587.6	1.76182
n_e	546.1	1.76859
n_F	486.1	1.78228
$n_{F'}$	480.0	1.78405
n_g	435.8	1.79986
n_h	404.7	1.81570
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	1.690223610
B_2	0.288870052
B_3	1.704518700
C_1	0.013051211
C_2	0.0613691880
C_3	149.51768900

Constants of Formula for dn/dT

D_0	-5.56E-06
D_1	7.09E-09
D_2	-1.09E-11
E_0	9.85E-07
E_1	1.39E-09
λ_{TK} [µm]	0.287

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.800	0.570
2325	0.840	0.640
1970	0.950	0.880
1530	0.992	0.980
1060	0.999	0.998
700	0.994	0.985
660	0.995	0.987
620	0.995	0.987
580	0.995	0.987
546	0.993	0.983
500	0.985	0.964
460	0.975	0.940
436	0.963	0.910
420	0.950	0.870
405	0.910	0.790
400	0.890	0.750
390	0.820	0.610
380	0.640	0.330
370	0.280	0.040
365	0.100	0.000
350	0.000	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	42/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2107
$P_{C,s}$	0.4646
$P_{d,C}$	0.2875
$P_{e,d}$	0.2357
$P_{g,F}$	0.6122
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2072
$P'_{C',s}$	0.5008
$P'_{d,C'}$	0.2387
$P'_{e,d}$	0.2318
$P'_{g,F'}$	0.5413
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0044
$\Delta P_{C,s}$	-0.0002
$\Delta P_{F,e}$	0.0024
$\Delta P_{g,F}$	0.0130
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.9
T_g [°C]	566
$T_{10^{13}}$ [°C]	562
$T_{10^{7.6}}$ [°C]	657
c_p [J/(g*K)]	0.750
λ [W/(m•K)]	1.000
ρ [g/cm³]	3.12
E [10^3 N/mm²]	88
µ	0.259
K [10^{-6} mm²/N]	2.89
$HK_{0.1/20}$	515
HG	5

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	-0.9	0.9	3.4	-3.2	-1.5	0.9
+20/+40	-1.1	1.1	4.1	-2.6	-0.4	2.5
+60/+80	-1.1	1.4	4.7	-2.2	0.2	3.4

Datasheet

SCHOTT
glass made of ideas

N-SF15
699302.292

n_d = 1.69892	ν_d = 30.20	$n_F - n_C$ = 0.023142
n_e = 1.70438	ν_e = 29.96	$n_{F'} - n_{C'}$ = 0.023511

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.65267
$n_{1970.1}$	1970.1	1.65899
$n_{1529.6}$	1529.6	1.66616
$n_{1060.0}$	1060.0	1.67494
n_t	1014.0	1.67609
n_s	852.1	1.68122
n_r	706.5	1.68854
n_C	656.3	1.69222
$n_{C'}$	643.8	1.69326
$n_{632.8}$	632.8	1.69425
n_D	589.3	1.69872
n_d	587.6	1.69892
n_e	546.1	1.70438
n_F	486.1	1.71536
$n_{F'}$	480.0	1.71677
n_g	435.8	1.72933
n_h	404.7	1.74182
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	1.570556340
B_2	0.218987094
B_3	1.508240170
C_1	0.011650701
C_2	0.0597856897
C_3	132.70933900

Constants of Formula for dn/dT

D_0	-7.15E-07
D_1	1.04E-08
D_2	-2.62E-11
E_0	8.56E-07
E_1	1.29E-09
λ_{TK} [µm]	0.281

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.760	0.510
2325	0.840	0.640
1970	0.954	0.890
1530	0.990	0.976
1060	0.998	0.996
700	0.995	0.988
660	0.993	0.983
620	0.994	0.984
580	0.994	0.986
546	0.994	0.985
500	0.988	0.970
460	0.977	0.940
436	0.964	0.910
420	0.940	0.860
405	0.890	0.740
400	0.860	0.680
390	0.750	0.480
380	0.530	0.200
370	0.160	0.010
365	0.040	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	42/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2216
$P_{C,s}$	0.4751
$P_{d,C}$	0.2897
$P_{e,d}$	0.2360
$P_{g,F}$	0.6038
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2181
$P'_{C',s}$	0.5122
$P'_{d,C'}$	0.2406
$P'_{e,d}$	0.2323
$P'_{g,F'}$	0.5341
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0085
$\Delta P_{C,s}$	0.0018
$\Delta P_{F,e}$	0.0018
$\Delta P_{g,F}$	0.0108
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.3
T_g [°C]	580
$T_{10^{13}}$ [°C]	578
$T_{10^{7.6}}$ [°C]	692
c_p [J/(g*K)]	0.760
λ [W/(m•K)]	1.040
ρ [g/cm³]	2.92
E [10^3 N/mm²]	90
µ	0.243
K [10^{-6} mm²/N]	3.04
$HK_{0.1/20}$	610
HG	3

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	1.6	3.1	5.0	-0.7	0.8	2.6
+20/+40	1.6	3.4	5.8	0.2	2.0	4.3
+60/+80	1.7	3.7	6.4	0.6	2.6	5.2

Datasheet

SCHOTT
glass made of ideas

N-SF57
847238.353

n_d = 1.84666	ν_d = 23.78	$n_F - n_C$ = 0.035604
n_e = 1.85504	ν_e = 23.59	$n_{F'} - n_{C'}$ = 0.036247

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.78502
$n_{1970.1}$	1970.1	1.79190
$n_{1529.6}$	1529.6	1.80011
$n_{1060.0}$	1060.0	1.81138
n_t	1014.0	1.81296
n_s	852.1	1.82023
n_r	706.5	1.83099
n_C	656.3	1.83650
$n_{C'}$	643.8	1.83807
$n_{632.8}$	632.8	1.83956
n_D	589.3	1.84635
n_d	587.6	1.84666
n_e	546.1	1.85504
n_F	486.1	1.87210
$n_{F'}$	480.0	1.87432
n_g	435.8	1.89423
n_h	404.7	1.91440
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	1.875438310
B_2	0.373757490
B_3	2.300017970
C_1	0.014174952
C_2	0.0640509927
C_3	177.38979500

Constants of Formula for dn/dT

D_0	-4.51E-06
D_1	8.73E-09
D_2	-1.64E-11
E_0	1.07E-06
E_1	1.57E-09
λ_{TK} [µm]	0.295

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.810	0.580
2325	0.840	0.640
1970	0.956	0.890
1530	0.992	0.980
1060	0.999	0.997
700	0.991	0.977
660	0.987	0.969
620	0.988	0.971
580	0.990	0.975
546	0.986	0.965
500	0.971	0.930
460	0.950	0.880
436	0.920	0.810
420	0.870	0.710
405	0.780	0.540
400	0.730	0.460
390	0.570	0.250
380	0.300	0.050
370	0.060	0.000
365	0.000	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	42/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2042
$P_{C,s}$	0.4568
$P_{d,C}$	0.2855
$P_{e,d}$	0.2353
$P_{g,F}$	0.6216
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2005
$P'_{C',s}$	0.4922
$P'_{d,C'}$	0.2369
$P'_{e,d}$	0.2311
$P'_{g,F'}$	0.5493
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0032
$\Delta P_{C,s}$	-0.0015
$\Delta P_{F,e}$	0.0033
$\Delta P_{g,F}$	0.0178
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.9
T_g [°C]	629
$T_{10^{13}}$ [°C]	616
$T_{10^{7.6}}$ [°C]	716
c_p [J/(g*K)]	0.660
λ [W/(m•K)]	0.990
ρ [g/cm^3]	3.53
E [10^3 N/mm^2]	96
µ	0.260
K [10^{-6} mm^2/N]	2.78
$HK_{0.1/20}$	520
HG	4
Abrasion Aa	175

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	-0.5	1.7	4.9	-2.9	-0.8	2.3
+20/+40	-0.5	2.2	6.0	-2.1	0.6	4.3
+60/+80	-0.4	2.6	6.9	-1.6	1.3	5.6

Datasheet

SCHOTT
glass made of ideas

N-SF57HT
847238.353

n_d = 1.84666	ν_d = 23.78	$n_F - n_C$ = 0.035604
n_e = 1.85504	ν_e = 23.59	$n_{F'} - n_{C'}$ = 0.036247

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.78502
$n_{1970.1}$	1970.1	1.79190
$n_{1529.6}$	1529.6	1.80011
$n_{1060.0}$	1060.0	1.81138
n_t	1014.0	1.81296
n_s	852.1	1.82023
n_r	706.5	1.83099
n_C	656.3	1.83650
$n_{C'}$	643.8	1.83807
$n_{632.8}$	632.8	1.83956
n_D	589.3	1.84635
n_d	587.6	1.84666
n_e	546.1	1.85504
n_F	486.1	1.87210
$n_{F'}$	480.0	1.87432
n_g	435.8	1.89423
n_h	404.7	1.91440
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	1.875438310
B_2	0.373757490
B_3	2.300017970
C_1	0.014174952
C_2	0.0640509927
C_3	177.38979500

Constants of Formula for dn/dT

D_0	-4.51E-06
D_1	8.73E-09
D_2	-1.64E-11
E_0	1.07E-06
E_1	1.57E-09
λ_{TK} [µm]	0.295

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.810	0.580
2325	0.840	0.640
1970	0.956	0.890
1530	0.992	0.980
1060	0.999	0.998
700	0.992	0.979
660	0.988	0.971
620	0.989	0.973
580	0.991	0.977
546	0.987	0.967
500	0.972	0.930
460	0.951	0.880
436	0.930	0.830
420	0.900	0.760
405	0.830	0.630
400	0.790	0.560
390	0.660	0.350
380	0.380	0.090
370	0.060	0.000
365	0.000	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	41/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2042
$P_{C,s}$	0.4568
$P_{d,C}$	0.2855
$P_{e,d}$	0.2353
$P_{g,F}$	0.6216
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2005
$P'_{C',s}$	0.4922
$P'_{d,C'}$	0.2369
$P'_{e,d}$	0.2311
$P'_{g,F'}$	0.5493
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0032
$\Delta P_{C,s}$	-0.0015
$\Delta P_{F,e}$	0.0033
$\Delta P_{g,F}$	0.0178
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.9
T_g [°C]	629
$T_{10^{13}}$ [°C]	616
$T_{10^{7.6}}$ [°C]	716
c_p [J/(g*K)]	0.660
λ [W/(m•K)]	0.990
ρ [g/cm³]	3.53
E [10^3 N/mm²]	96
µ	0.260
K [10^{-6} mm²/N]	2.78
$HK_{0.1/20}$	520
HG	4
Abrasion Aa	175

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	-0.5	1.7	4.9	-2.9	-0.8	2.3
+20/+40	-0.5	2.2	6.0	-2.1	0.6	4.3
+60/+80	-0.4	2.6	6.9	-1.6	1.3	5.6

Datasheet

SCHOTT
glass made of ideas

N-SF57HTultra
847238.353

n_d = 1.84666	ν_d = 23.78	$n_F - n_C$ = 0.035604
n_e = 1.85504	ν_e = 23.59	$n_{F'} - n_{C'}$ = 0.036247

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.78502
$n_{1970.1}$	1970.1	1.79190
$n_{1529.6}$	1529.6	1.80011
$n_{1060.0}$	1060.0	1.81138
n_t	1014.0	1.81296
n_s	852.1	1.82023
n_r	706.5	1.83099
n_C	656.3	1.83650
$n_{C'}$	643.8	1.83807
$n_{632.8}$	632.8	1.83956
n_D	589.3	1.84635
n_d	587.6	1.84666
n_e	546.1	1.85504
n_F	486.1	1.87210
$n_{F'}$	480.0	1.87432
n_g	435.8	1.89423
n_h	404.7	1.91440
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	1.875438310
B_2	0.373757490
B_3	2.300017970
C_1	0.014174952
C_2	0.0640509927
C_3	177.38979500

Constants of Formula for dn/dT

D_0	-4.51E-06
D_1	8.73E-09
D_2	-1.64E-11
E_0	1.07E-06
E_1	1.57E-09
λ_{TK} [µm]	0.295

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.810	0.580
2325	0.840	0.640
1970	0.956	0.890
1530	0.992	0.980
1060	0.999	0.998
700	0.995	0.988
660	0.994	0.985
620	0.993	0.983
580	0.992	0.981
546	0.989	0.973
500	0.978	0.950
460	0.962	0.910
436	0.940	0.860
420	0.920	0.810
405	0.860	0.690
400	0.830	0.630
390	0.700	0.410
380	0.420	0.110
370	0.060	0.000
365	0.000	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	40/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2042
$P_{C,s}$	0.4568
$P_{d,C}$	0.2855
$P_{e,d}$	0.2353
$P_{g,F}$	0.6216
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2005
$P'_{C',s}$	0.4922
$P'_{d,C'}$	0.2369
$P'_{e,d}$	0.2311
$P'_{g,F'}$	0.5493
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0032
$\Delta P_{C,s}$	-0.0015
$\Delta P_{F,e}$	0.0033
$\Delta P_{g,F}$	0.0178
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.9
T_g [°C]	629
$T_{10^{13}}$ [°C]	616
$T_{10^{7.6}}$ [°C]	716
c_p [J/(g*K)]	0.660
λ [W/(m•K)]	0.990
ρ [g/cm³]	3.53
E [10^3 N/mm²]	96
µ	0.260
K [10^{-6} mm²/N]	2.78
$HK_{0.1/20}$	520
HG	4
Abrasion Aa	175

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	-0.5	1.7	4.9	-2.9	-0.8	2.3
+20/+40	-0.5	2.2	6.0	-2.1	0.6	4.3
+60/+80	-0.4	2.6	6.9	-1.6	1.3	5.6

Datasheet

SCHOTT
glass made of ideas

N-SF66
923209.400

n_d = 1.92286	ν_d = 20.88	$n_F - n_C$ = 0.044199
n_e = 1.93322	ν_e = 20.70	$n_{F'} - n_{C'}$ = 0.045076

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.84839
$n_{1970.1}$	1970.1	1.85665
$n_{1529.6}$	1529.6	1.86650
$n_{1060.0}$	1060.0	1.87999
n_t	1014.0	1.88189
n_s	852.1	1.89064
n_r	706.5	1.90368
n_C	656.3	1.91039
$n_{C'}$	643.8	1.91232
$n_{632.8}$	632.8	1.91414
n_D	589.3	1.92248
n_d	587.6	1.92286
n_e	546.1	1.93322
n_F	486.1	1.95459
$n_{F'}$	480.0	1.95739
n_g	435.8	1.98285
n_h	404.7	
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	2.024597600
B_2	0.470187196
B_3	2.599704330
C_1	0.014705323
C_2	0.0692998276
C_3	161.81760100

Constants of Formula for dn/dT

D_0	-4.30E-06
D_1	1.15E-08
D_2	4.31E-11
E_0	9.62E-07
E_1	1.62E-09
λ_{TK} [µm]	0.322

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.79	0.56
2325	0.84	0.64
1970	0.95	0.87
1530	0.989	0.973
1060	0.996	0.991
700	0.991	0.977
660	0.987	0.968
620	0.983	0.958
580	0.976	0.94
546	0.963	0.91
500	0.93	0.83
460	0.89	0.74
436	0.83	0.63
420	0.76	0.50
405	0.59	0.27
400	0.50	0.18
390	0.25	0.02
380	0.04	
370	0.00	
365	0.00	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	45/38

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.1980
$P_{C,s}$	0.4467
$P_{d,C}$	0.2822
$P_{e,d}$	0.2345
$P_{g,F}$	0.6394
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.1941
$P'_{C',s}$	0.4808
$P'_{d,C'}$	0.2339
$P'_{e,d}$	0.2299
$P'_{g,F'}$	0.5647
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0007
$\Delta P_{C,s}$	-0.0048
$\Delta P_{F,e}$	0.0059
$\Delta P_{g,F}$	0.0307
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.9
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.8
T_g [°C]	710
$T_{10^{13}}$ [°C]	719
$T_{10^{7.6}}$ [°C]	800
c_p [J/(g*K)]	0.540
λ [W/(m•K)]	0.800
ρ [g/cm³]	4.00
E [10^3 N/mm²]	95
µ	0.259
K [10^{-6} mm²/N]	2.91
$HK_{0.1/20}$	440
HG	3

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	-0.4	1.9	5.8	-2.9	-0.7	3.1
+20/+40	-0.5	2.4	7.3	-2.1	0.8	5.5
+60/+80	0.1	3.4	8.9	-1.2	2.1	7.5

Datasheet

SCHOTT
glass made of ideas

P-SF8
689313.290

n_d = 1.68893	ν_d = 31.25	$n_F - n_C$ = 0.022046
n_e = 1.69414	ν_e = 31.01	$n_{F'} - n_{C'}$ = 0.022386

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.64480
$n_{1970.1}$	1970.1	1.65079
$n_{1529.6}$	1529.6	1.65760
$n_{1060.0}$	1060.0	1.66598
n_t	1014.0	1.66708
n_s	852.1	1.67200
n_r	706.5	1.67901
n_C	656.3	1.68252
$n_{C'}$	643.8	1.68353
$n_{632.8}$	632.8	1.68447
n_D	589.3	1.68874
n_d	587.6	1.68893
n_e	546.1	1.69414
n_F	486.1	1.70457
$n_{F'}$	480.0	1.70591
n_g	435.8	1.71778
n_h	404.7	1.72950
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	1.553704110
B_2	0.206332561
B_3	1.397088310
C_1	0.011658267
C_2	0.0582087757
C_3	130.74802800

Constants of Formula for dn/dT

D_0	-4.27E-06
D_1	8.16E-09
D_2	-2.00E-11
E_0	9.02E-07
E_1	1.22E-09
λ_{TK} [µm]	0.272

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.730	0.450
2325	0.800	0.570
1970	0.940	0.850
1530	0.991	0.977
1060	0.999	0.997
700	0.995	0.988
660	0.994	0.984
620	0.994	0.984
580	0.995	0.987
546	0.994	0.986
500	0.989	0.972
460	0.980	0.950
436	0.971	0.930
420	0.959	0.900
405	0.940	0.850
400	0.920	0.820
390	0.870	0.710
380	0.750	0.480
370	0.470	0.150
365	0.260	0.040
350	0.000	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	40/36

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2229
$P_{C,s}$	0.4776
$P_{d,C}$	0.2905
$P_{e,d}$	0.2362
$P_{g,F}$	0.5991
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2195
$P'_{C',s}$	0.5150
$P'_{d,C'}$	0.2414
$P'_{e,d}$	0.2326
$P'_{g,F'}$	0.5301
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0072
$\Delta P_{C,s}$	0.0018
$\Delta P_{F,e}$	0.0013
$\Delta P_{g,F}$	0.0079
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1.2
PR	1
SR-J	1
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	11.1
T_g [°C]	524
$T_{10^{13}}$ [°C]	531
$T_{10^{7.6}}$ [°C]	629
c_p [J/(g*K)]	0.790
λ [W/(m•K)]	1.020
AT [°C]	580
ρ [g/cm³]	2.90
E [10^3 N/mm²]	86
µ	0.253
K [10^{-6} mm²/N]	2.73
$HK_{0.1/20}$	533
Abrasion Aa	200

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	-0.2	1.3	3.2	-2.4	-1.0	0.8
+20/+40	-0.3	1.5	3.7	-1.7	0.0	2.2
+60/+80	-0.3	1.7	4.1	-1.4	0.5	3.0

Datasheet

SCHOTT
glass made of ideas

P-SF68
005210.619

n_d = 2.00520	ν_d = 21.00	$n_F - n_C$ = 0.047867
n_e = 2.01643	ν_e = 20.82	$n_{F'} - n_{C'}$ = 0.048826

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.93381
$n_{1970.1}$	1970.1	1.93968
$n_{1529.6}$	1529.6	1.94732
$n_{1060.0}$	1060.0	1.95970
n_t	1014.0	1.96160
n_s	852.1	1.97063
n_r	706.5	1.98449
n_C	656.3	1.99171
$n_{C'}$	643.8	1.99380
$n_{632.8}$	632.8	1.99576
n_D	589.3	2.00479
n_d	587.6	2.00520
n_e	546.1	2.01643
n_F	486.1	2.03958
$n_{F'}$	480.0	2.04262
n_g	435.8	2.07018
n_h	404.7	
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	2.333006700
B_2	0.452961396
B_3	1.251723390
C_1	0.016883842
C_2	0.0716086325
C_3	118.70747900

Constants of Formula for dn/dT

D_0	1.55E-05
D_1	2.30E-08
D_2	-3.46E-11
E_0	2.76E-06
E_1	2.93E-09
λ_{TK} [µm]	0.297

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.790	0.560
2325	0.910	0.780
1970	0.976	0.940
1530	0.996	0.990
1060	0.999	0.998
700	0.997	0.993
660	0.996	0.989
620	0.994	0.985
580	0.989	0.973
546	0.976	0.940
500	0.910	0.780
460	0.760	0.500
436	0.570	0.250
420	0.300	0.050
405	0.040	0.000
400	0.010	
390	0.000	
380		
370		
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	49/41

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.1885
$P_{C,s}$	0.4406
$P_{d,C}$	0.2817
$P_{e,d}$	0.2346
$P_{g,F}$	0.6392
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.1848
$P'_{C',s}$	0.4746
$P'_{d,C'}$	0.2336
$P'_{e,d}$	0.2300
$P'_{g,F'}$	0.5644
$P'_{i,h}$	

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

$\Delta P_{C,t}$	-0.0156
$\Delta P_{C,s}$	-0.0113
$\Delta P_{F,e}$	0.0063
$\Delta P_{g,F}$	0.0308
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	5
SR	53.3
AR	1-2,3
PR	2.3
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.7
T_g [°C]	428
$T_{10^{13}}$ [°C]	430
$T_{10^{7.6}}$ [°C]	504
c_p [J/(g*K)]	0.370
λ [W/(m•K)]	0.650
AT [°C]	468
ρ [g/cm^3]	6.19
E [10^3 N/mm^2]	79
µ	0.275
K [10^{-6} mm^2/N]	1.61
$HK_{0.1/20}$	404
Abrasion Aa	298

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	13.7	21.5	32.3	11.1	18.8	29.5
+20/+40	15.2	24.1	36.5	13.5	22.3	34.6
+60/+80	16.2	25.8	39.1	15.4	25.3	39.2

Datasheet

SCHOTT
glass made of ideas

P-SF69
723292.293

n_d = 1.72250	ν_d = 29.23	$n_F - n_C$ = 0.024718
n_e = 1.72833	ν_e = 29.00	$n_{F'} - n_{C'}$ = 0.025116

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.67440
$n_{1970.1}$	1970.1	1.68073
$n_{1529.6}$	1529.6	1.68797
$n_{1060.0}$	1060.0	1.69705
n_t	1014.0	1.69826
n_s	852.1	1.70367
n_r	706.5	1.71144
n_C	656.3	1.71535
$n_{C'}$	643.8	1.71647
$n_{632.8}$	632.8	1.71752
n_D	589.3	1.72229
n_d	587.6	1.72250
n_e	546.1	1.72833
n_F	486.1	1.74007
$n_{F'}$	480.0	1.74158
n_g	435.8	1.75502
n_h	404.7	1.76840
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	1.625946470
B_2	0.235927609
B_3	1.674346230
C_1	0.012169668
C_2	0.0600710405
C_3	145.65190800

Constants of Formula for dn/dT

D_0	-2.55E-06
D_1	5.68E-09
D_2	-2.85E-11
E_0	9.50E-07
E_1	1.54E-09
λ_{TK} [µm]	0.275

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.800	0.580
2325	0.860	0.680
1970	0.954	0.890
1530	0.993	0.983
1060	0.999	0.998
700	0.998	0.994
660	0.997	0.993
620	0.997	0.993
580	0.998	0.994
546	0.997	0.992
500	0.993	0.983
460	0.985	0.964
436	0.976	0.940
420	0.963	0.910
405	0.930	0.840
400	0.920	0.800
390	0.850	0.660
380	0.690	0.390
370	0.360	0.080
365	0.160	0.010
350	0.000	0.000
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	41/36

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2188
$P_{C,s}$	0.4727
$P_{d,C}$	0.2893
$P_{e,d}$	0.2360
$P_{g,F}$	0.6050
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2153
$P'_{C',s}$	0.5096
$P'_{d,C'}$	0.2403
$P'_{e,d}$	0.2322
$P'_{g,F'}$	0.5352
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0078
$\Delta P_{C,s}$	0.0016
$\Delta P_{F,e}$	0.0017
$\Delta P_{g,F}$	0.0104
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	11.1
T_g [°C]	508
$T_{10^{13}}$ [°C]	508
$T_{10^{7.6}}$ [°C]	602
c_p [J/(g*K)]	0.820
λ [W/(m•K)]	1.120
AT [°C]	547
ρ [g/cm³]	2.93
E [10^3 N/mm²]	96
µ	0.251
K [10^{-6} mm²/N]	2.66
$HK_{0.1/20}$	612
Abrasion Aa	142

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	0.9	2.5	4.6	-1.4	0.1	2.1
+20/+40	0.6	2.6	5.2	-0.8	1.1	3.6
+60/+80	0.5	2.8	5.6	-0.6	1.6	4.4

Datasheet

SCHOTT
glass made of ideas

SF1
717295.446

n_d = 1.71736	ν_d = 29.51	$n_F - n_C$ = 0.024307
n_e = 1.72310	ν_e = 29.29	$n_{F'} - n_{C'}$ = 0.024687

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.67352
$n_{1970.1}$	1970.1	1.67855
$n_{1529.6}$	1529.6	1.68449
$n_{1060.0}$	1060.0	1.69258
n_t	1014.0	1.69371
n_s	852.1	1.69888
n_r	706.5	1.70647
n_C	656.3	1.71031
$n_{C'}$	643.8	1.71141
$n_{632.8}$	632.8	1.71245
n_D	589.3	1.71715
n_d	587.6	1.71736
n_e	546.1	1.72310
n_F	486.1	1.73462
$n_{F'}$	480.0	1.73610
n_g	435.8	1.74916
n_h	404.7	1.76201
n_i	365.0	1.78580
$n_{334.1}$	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	1.559129230
B_2	0.284246288
B_3	0.968842926
C_1	0.012148100
C_2	0.0534549042
C_3	112.17480900

Constants of Formula for dn/dT

D_0	4.84E-06
D_1	1.70E-08
D_2	-4.52E-11
E_0	1.38E-06
E_1	1.26E-09
λ_{TK} [µm]	0.259

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.840	0.650
2325	0.880	0.730
1970	0.959	0.900
1530	0.994	0.985
1060	0.998	0.996
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.996
546	0.998	0.996
500	0.997	0.993
460	0.994	0.984
436	0.990	0.976
420	0.984	0.961
405	0.971	0.930
400	0.967	0.920
390	0.950	0.870
380	0.910	0.790
370	0.840	0.640
365	0.760	0.500
350	0.300	0.030
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	39/34

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2127
$P_{C,s}$	0.4705
$P_{d,C}$	0.2899
$P_{e,d}$	0.2364
$P_{g,F}$	0.5983
$P_{i,h}$	0.9791

Relative Partial Dispersion P'

$P'_{s,t}$	0.2094
$P'_{C',s}$	0.5078
$P'_{d,C'}$	0.2409
$P'_{e,d}$	0.2327
$P'_{g,F'}$	0.5292
$P'_{i,h}$	0.9640

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

$\Delta P_{C,t}$	-0.0018
$\Delta P_{C,s}$	-0.0012
$\Delta P_{F,e}$	0.0009
$\Delta P_{g,F}$	0.0042
$\Delta P_{i,g}$	0.0307

Chemical Properties

CR	2
FR	1
SR	3.2
AR	2.3
PR	3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.8
T_g [°C]	417
$T_{10^{13}}$ [°C]	415
$T_{10^{7.6}}$ [°C]	566
c_p [J/(g*K)]	0.430
λ [W/(m•K)]	0.660
ρ [g/cm³]	4.46
E [10^3 N/mm²]	56
µ	0.232
K [10^{-6} mm²/N]	1.80
$HK_{0.1/20}$	390
HG	1

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	4.5	7.0	10.1	2.2	4.7	7.7
+20/+40	5.0	7.9	11.3	3.6	6.4	9.8
+60/+80	5.3	8.4	12.1	4.2	7.3	10.9

Datasheet

SCHOTT
glass made of ideas

SF2
648339.386

n_d = 1.64769	ν_d = 33.85	$n_F - n_C$ = 0.019135
n_e = 1.65222	ν_e = 33.60	$n_{F'} - n_{C'}$ = 0.019412

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.61003
$n_{1970.1}$	1970.1	1.61494
$n_{1529.6}$	1529.6	1.62055
$n_{1060.0}$	1060.0	1.62766
n_t	1014.0	1.62861
n_s	852.1	1.63289
n_r	706.5	1.63902
n_C	656.3	1.64210
$n_{C'}$	643.8	1.64297
$n_{632.8}$	632.8	1.64379
n_D	589.3	1.64752
n_d	587.6	1.64769
n_e	546.1	1.65222
n_F	486.1	1.66123
$n_{F'}$	480.0	1.66238
n_g	435.8	1.67249
n_h	404.7	1.68233
n_i	365.0	1.70027
$n_{334.1}$	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	1.403018210
B_2	0.231767504
B_3	0.939056586
C_1	0.010579547
C_2	0.0493226978
C_3	112.40595500

Constants of Formula for dn/dT

D_0	1.10E-06
D_1	1.75E-08
D_2	-1.29E-11
E_0	1.08E-06
E_1	1.03E-09
λ_{TK} [µm]	0.249

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.830	0.620
2325	0.870	0.710
1970	0.950	0.880
1530	0.994	0.985
1060	0.998	0.996
700	0.998	0.996
660	0.998	0.994
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	0.993	0.982
420	0.990	0.975
405	0.985	0.962
400	0.981	0.954
390	0.967	0.920
380	0.950	0.870
370	0.910	0.790
365	0.880	0.720
350	0.670	0.370
334	0.110	
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	37/33

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2233
$P_{C,s}$	0.4813
$P_{d,C}$	0.2923
$P_{e,d}$	0.2367
$P_{g,F}$	0.5886
$P_{i,h}$	0.9376

Relative Partial Dispersion P'

$P'_{s,t}$	0.2201
$P'_{C',s}$	0.5196
$P'_{d,C'}$	0.2430
$P'_{e,d}$	0.2334
$P'_{g,F'}$	0.5209
$P'_{i,h}$	0.9242

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

$\Delta P_{C,t}$	-0.0009
$\Delta P_{C,s}$	-0.0005
$\Delta P_{F,e}$	0.0004
$\Delta P_{g,F}$	0.0017
$\Delta P_{i,g}$	0.0112

Chemical Properties

CR	1
FR	0
SR	2
AR	2.3
PR	2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.2
T_g [°C]	441
$T_{10^{13}}$ [°C]	428
$T_{10^{7.6}}$ [°C]	600
c_p [J/(g*K)]	0.498
λ [W/(m•K)]	0.735
ρ [g/cm³]	3.86
E [10^3 N/mm²]	55
µ	0.227
K [10^{-6} mm²/N]	2.62
$HK_{0.1/20}$	410
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	2.3	4.0	6.0	0.1	1.8	3.7
+20/+40	2.7	4.6	6.9	1.3	3.2	5.4
+60/+80	3.1	5.2	7.6	2.0	4.1	6.4

Datasheet

SF3
740282.464

n_d = 1.74000 ν_d = 28.20 $n_F - n_C$ = 0.026244
n_e = 1.74620 ν_e = 27.98 $n_{F'} - n_{C'}$ = 0.026667

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.69410
$n_{1970.1}$	1970.1	1.69910
$n_{1529.6}$	1529.6	1.70511
$n_{1060.0}$	1060.0	1.71350
n_t	1014.0	1.71469
n_s	852.1	1.72017
n_r	706.5	1.72829
n_C	656.3	1.73242
$n_{C'}$	643.8	1.73360
$n_{632.8}$	632.8	1.73471
n_D	589.3	1.73977
n_d	587.6	1.74000
n_e	546.1	1.74620
n_F	486.1	1.75866
$n_{F'}$	480.0	1.76027
n_g	435.8	1.77446
n_h	404.7	1.78846
n_i	365.0	1.81452
$n_{334.1}$	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	1.572305420
B_2	0.339661149
B_3	1.035937120
C_1	0.012038218
C_2	0.0531603583
C_3	120.00538100

Constants of Formula for dn/dT

D_0	3.72E-06
D_1	1.74E-08
D_2	-3.21E-11
E_0	1.49E-06
E_1	1.41E-09
λ_{TK} [µm]	0.260

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500		
2325	0.900	0.760
1970	0.963	0.910
1530	0.994	0.986
1060	0.998	0.995
700	0.999	0.998
660	0.999	0.997
620	0.999	0.997
580	0.998	0.995
546	0.997	0.993
500	0.996	0.990
460	0.991	0.977
436	0.984	0.960
420	0.971	0.930
405	0.950	0.880
400	0.940	0.860
390	0.910	0.780
380	0.840	0.650
370	0.730	0.460
365	0.650	0.340
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	40/35

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2090
$P_{C,s}$	0.4665
$P_{d,C}$	0.2890
$P_{e,d}$	0.2362
$P_{g,F}$	0.6020
$P_{i,h}$	0.9929

Relative Partial Dispersion P'

$P'_{s,t}$	0.2057
$P'_{C',s}$	0.5034
$P'_{d,C'}$	0.2401
$P'_{e,d}$	0.2325
$P'_{g,F'}$	0.5323
$P'_{i,h}$	0.9772

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

$\Delta P_{C,t}$	-0.0032
$\Delta P_{C,s}$	-0.0021
$\Delta P_{F,e}$	0.0012
$\Delta P_{g,F}$	0.0056
$\Delta P_{i,g}$	0.0386

Chemical Properties

CR	1
FR	2
SR	4.3
AR	2.3
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.5
T_g [°C]	415
$T_{10^{13}}$ [°C]	404
$T_{10^{7.6}}$ [°C]	548
c_p [J/(g*K)]	0.423
λ [W/(m•K)]	0.706
ρ [g/cm³]	4.64
E [10^3 N/mm²]	56
µ	0.236
K [10^{-6} mm²/N]	1.53
$HK_{0.1/20}$	380

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	4.0	6.8	10.2	1.7	4.5	7.7
+20/+40	4.6	7.8	11.5	3.1	6.2	10.0
+60/+80	5.0	8.4	12.4	3.8	7.2	11.2

Datasheet

SCHOTT
glass made of ideas

SF4
755276.479

n_d = 1.75520	ν_d = 27.58	$n_F - n_C$ = 0.027383
n_e = 1.76167	ν_e = 27.37	$n_{F'} - n_{C'}$ = 0.027829

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.70789
$n_{1970.1}$	1970.1	1.71294
$n_{1529.6}$	1529.6	1.71904
$n_{1060.0}$	1060.0	1.72765
n_t	1014.0	1.72888
n_s	852.1	1.73456
n_r	706.5	1.74300
n_C	656.3	1.74730
$n_{C'}$	643.8	1.74853
$n_{632.8}$	632.8	1.74969
n_D	589.3	1.75496
n_d	587.6	1.75520
n_e	546.1	1.76167
n_F	486.1	1.77468
$n_{F'}$	480.0	1.77636
n_g	435.8	1.79121
n_h	404.7	1.80589
n_i	365.0	1.83330
$n_{334.1}$	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	1.619578260
B_2	0.339493189
B_3	1.025669310
C_1	0.012550210
C_2	0.0544559822
C_3	117.65222200

Constants of Formula for dn/dT

D_0	5.60E-06
D_1	1.70E-08
D_2	-5.27E-11
E_0	1.54E-06
E_1	1.46E-09
λ_{TK} [µm]	0.266

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.850	0.660
2325	0.890	0.740
1970	0.963	0.910
1530	0.996	0.989
1060	0.998	0.996
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.996
546	0.998	0.996
500	0.996	0.991
460	0.992	0.980
436	0.987	0.967
420	0.980	0.950
405	0.963	0.910
400	0.954	0.890
390	0.920	0.820
380	0.860	0.690
370	0.730	0.450
365	0.600	0.280
350	0.090	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	40/35

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2076
$P_{C,s}$	0.4650
$P_{d,C}$	0.2886
$P_{e,d}$	0.2361
$P_{g,F}$	0.6036
$P_{i,h}$	1.0012

Relative Partial Dispersion P'

$P'_{s,t}$	0.2042
$P'_{C',s}$	0.5018
$P'_{d,C'}$	0.2398
$P'_{e,d}$	0.2323
$P'_{g,F'}$	0.5337
$P'_{i,h}$	0.9851

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

$\Delta P_{C,t}$	-0.0032
$\Delta P_{C,s}$	-0.0022
$\Delta P_{F,e}$	0.0014
$\Delta P_{g,F}$	0.0062
$\Delta P_{i,g}$	0.0443

Chemical Properties

CR	1
FR	2
SR	4.3
AR	2.3
PR	3.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.9
T_g [°C]	420
$T_{10^{13}}$ [°C]	415
$T_{10^{7.6}}$ [°C]	552
c_p [J/(g*K)]	0.410
λ [W/(m•K)]	0.650
ρ [g/cm³]	4.79
E [10^3 N/mm²]	56
µ	0.241
K [10^{-6} mm²/N]	1.36
$HK_{0.1/20}$	390
HG	1

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	5.1	8.1	11.8	2.8	5.7	9.4
+20/+40	5.7	9.2	13.3	4.3	7.7	11.8
+60/+80	6.0	9.7	14.2	4.9	8.5	13.0

Datasheet

SCHOTT
glass made of ideas

SF5
673322.407

n_d = 1.67270	ν_d = 32.21	$n_F - n_C$ = 0.020885
n_e = 1.67764	ν_e = 31.97	$n_{F'} - n_{C'}$ = 0.021195

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.63289
$n_{1970.1}$	1970.1	1.63785
$n_{1529.6}$	1529.6	1.64359
$n_{1060.0}$	1060.0	1.65104
n_t	1014.0	1.65206
n_s	852.1	1.65664
n_r	706.5	1.66327
n_C	656.3	1.66661
$n_{C'}$	643.8	1.66756
$n_{632.8}$	632.8	1.66846
n_D	589.3	1.67252
n_d	587.6	1.67270
n_e	546.1	1.67764
n_F	486.1	1.68750
$n_{F'}$	480.0	1.68876
n_g	435.8	1.69986
n_h	404.7	1.71069
n_i	365.0	1.73056
$n_{334.1}$	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	1.461418850
B_2	0.247713019
B_3	0.949995832
C_1	0.011182613
C_2	0.0508594669
C_3	112.04188800

Constants of Formula for dn/dT

D_0	2.59E-06
D_1	1.76E-08
D_2	-2.03E-11
E_0	1.17E-06
E_1	1.09E-09
λ_{TK} [µm]	0.255

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.85	0.66
2325	0.89	0.74
1970	0.959	0.90
1530	0.995	0.987
1060	0.998	0.996
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.996
546	0.998	0.996
500	0.997	0.993
460	0.995	0.988
436	0.993	0.982
420	0.989	0.973
405	0.983	0.959
400	0.980	0.950
390	0.967	0.92
380	0.950	0.88
370	0.91	0.80
365	0.88	0.73
350	0.63	0.31
334	0.20	
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	37/33

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2194
$P_{C,s}$	0.4775
$P_{d,C}$	0.2915
$P_{e,d}$	0.2366
$P_{g,F}$	0.5919
$P_{i,h}$	0.9513

Relative Partial Dispersion P'

$P'_{s,t}$	0.2162
$P'_{C',s}$	0.5153
$P'_{d,C'}$	0.2423
$P'_{e,d}$	0.2331
$P'_{g,F'}$	0.5237
$P'_{i,h}$	0.9374

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

$\Delta P_{C,t}$	-0.0010
$\Delta P_{C,s}$	-0.0005
$\Delta P_{F,e}$	0.0005
$\Delta P_{g,F}$	0.0023
$\Delta P_{i,g}$	0.0160

Chemical Properties

CR	1
FR	1
SR	2
AR	2.3
PR	3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.0
T_g [°C]	425
$T_{10^{13}}$ [°C]	421
$T_{10^{7.6}}$ [°C]	580
c_p [J/(g*K)]	0.470
λ [W/(m•K)]	0.690
ρ [g/cm³]	4.07
E [10^3 N/mm²]	56
µ	0.233
K [10^{-6} mm²/N]	2.29
$HK_{0.1/20}$	410
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	3.1	5.1	7.4	0.9	2.8	5.1
+20/+40	3.5	5.8	8.4	2.1	4.4	6.9
+60/+80	3.9	6.4	9.2	2.8	5.2	8.0

Datasheet

SF6
805254.518

n_d = 1.80518 ν_d = 25.43 $n_F - n_C$ = 0.031660
n_e = 1.81265 ν_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

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	0.991	0.978
436	0.982	0.955
420	0.967	0.920
405	0.930	0.840
400	0.920	0.800
390	0.850	0.660
380	0.720	0.440
370	0.440	0.130
365	0.250	0.030
350	0.000	0.000
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	42/36

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

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.1
$\alpha_{+20/+300°C}$ [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/cm³]	5.18
E [10^3 N/mm²]	55
µ	0.244
K [10^{-6} mm²/N]	0.65
$HK_{0.1/20}$	370
HG	1

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	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

Datasheet

SF6HT
805254.518

n_d = 1.80518 ν_d = 25.43 $n_F - n_C$ = 0.031660
n_e = 1.81265 ν_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

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

λ80 / λ5	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

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.1
$\alpha_{+20/+300°C}$ [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/cm³]	5.18
E [10^3 N/mm²]	55
µ	0.244
K [10^{-6} mm²/N]	0.65
$HK_{0.1/20}$	370
HG	1

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	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

Datasheet

SCHOTT
glass made of ideas

SF10
728284.428

n_d = 1.72825	ν_d = 28.41	$n_F - n_C$ = 0.025633
n_e = 1.73430	ν_e = 28.19	$n_{F'} - n_{C'}$ = 0.026051

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.68218
$n_{1970.1}$	1970.1	1.68750
$n_{1529.6}$	1529.6	1.69378
$n_{1060.0}$	1060.0	1.70227
n_t	1014.0	1.70345
n_s	852.1	1.70887
n_r	706.5	1.71681
n_C	656.3	1.72085
$n_{C'}$	643.8	1.72200
$n_{632.8}$	632.8	1.72309
n_D	589.3	1.72803
n_d	587.6	1.72825
n_e	546.1	1.73430
n_F	486.1	1.74648
$n_{F'}$	480.0	1.74805
n_g	435.8	1.76198
n_h	404.7	1.77579
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	1.616259770
B_2	0.259229334
B_3	1.077623170
C_1	0.012753456
C_2	0.0581983954
C_3	116.60768000

Constants of Formula for dn/dT

D_0	5.31E-06
D_1	1.59E-08
D_2	-4.07E-11
E_0	1.28E-06
E_1	1.32E-09
λ_{TK} [µm]	0.270

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.860	0.690
2325	0.900	0.760
1970	0.967	0.920
1530	0.995	0.987
1060	0.999	0.997
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	0.996	0.989
460	0.991	0.978
436	0.984	0.961
420	0.967	0.920
405	0.910	0.790
400	0.860	0.690
390	0.670	0.370
380	0.360	0.060
370	0.080	
365	0.020	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	41/37

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2111
$P_{C,s}$	0.4674
$P_{d,C}$	0.2888
$P_{e,d}$	0.2361
$P_{g,F}$	0.6046
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2077
$P'_{C',s}$	0.5042
$P'_{d,C'}$	0.2399
$P'_{e,d}$	0.2323
$P'_{g,F'}$	0.5346
$P'_{i,h}$	

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

$\Delta P_{C,t}$	-0.0012
$\Delta P_{C,s}$	-0.0017
$\Delta P_{F,e}$	0.0017
$\Delta P_{g,F}$	0.0085
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1.2
PR	2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.4
T_g [°C]	454
$T_{10^{13}}$ [°C]	445
$T_{10^{7.6}}$ [°C]	595
c_p [J/(g*K)]	0.465
λ [W/(m•K)]	0.741
ρ [g/cm³]	4.28
E [10^3 N/mm²]	64
µ	0.232
K [10^{-6} mm²/N]	1.95
$HK_{0.1/20}$	430
HG	1

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	4.8	7.3	10.3	2.5	4.9	7.9
+20/+40	5.3	8.1	11.6	3.8	6.6	10.0
+60/+80	5.6	8.6	12.4	4.4	7.4	11.1

Datasheet

SCHOTT
glass made of ideas

SF11
785258.474

n_d = 1.78472	ν_d = 25.76	$n_F - n_C$ = 0.030467
n_e = 1.79190	ν_e = 25.55	$n_{F'} - n_{C'}$ = 0.030997

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.73294
$n_{1970.1}$	1970.1	1.73843
$n_{1529.6}$	1529.6	1.74506
$n_{1060.0}$	1060.0	1.75445
n_t	1014.0	1.75579
n_s	852.1	1.76200
n_r	706.5	1.77125
n_C	656.3	1.77599
$n_{C'}$	643.8	1.77734
$n_{632.8}$	632.8	1.77862
n_D	589.3	1.78446
n_d	587.6	1.78472
n_e	546.1	1.79190
n_F	486.1	1.80645
$n_{F'}$	480.0	1.80834
n_g	435.8	1.82518
n_h	404.7	1.84208
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	1.738484030
B_2	0.311168974
B_3	1.174908710
C_1	0.013606860
C_2	0.0615960463
C_3	121.92271100

Constants of Formula for dn/dT

D_0	1.12E-05
D_1	1.81E-08
D_2	-5.03E-11
E_0	1.46E-06
E_1	1.58E-09
λ_{TK} [µm]	0.282

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.820	0.610
2325	0.870	0.700
1970	0.971	0.930
1530	0.993	0.982
1060	0.999	0.997
700	0.997	0.993
660	0.996	0.991
620	0.996	0.991
580	0.996	0.991
546	0.996	0.989
500	0.990	0.976
460	0.976	0.940
436	0.940	0.860
420	0.870	0.700
405	0.650	0.340
400	0.530	0.200
390	0.180	0.010
380		
370		
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	44/39

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2039
$P_{C,s}$	0.4590
$P_{d,C}$	0.2866
$P_{e,d}$	0.2356
$P_{g,F}$	0.6147
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2004
$P'_{C',s}$	0.4949
$P'_{d,C'}$	0.2380
$P'_{e,d}$	0.2316
$P'_{g,F'}$	0.5433
$P'_{i,h}$	

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

$\Delta P_{C,t}$	-0.0043
$\Delta P_{C,s}$	-0.0040
$\Delta P_{F,e}$	0.0029
$\Delta P_{g,F}$	0.0142
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1.2
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.8
T_g [°C]	503
$T_{10^{13}}$ [°C]	500
$T_{10^{7.6}}$ [°C]	635
c_p [J/(g*K)]	0.431
λ [W/(m•K)]	0.737
ρ [g/cm³]	4.74
E [10^3 N/mm²]	66
µ	0.235
K [10^{-6} mm²/N]	1.33
$HK_{0.1/20}$	450
HG	1

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	8.4	11.7	15.8	6.1	9.2	13.3
+20/+40	9.2	12.9	17.6	7.7	11.3	16.0
+60/+80	9.6	13.6	18.7	8.4	12.4	17.4

Datasheet

SCHOTT
glass made of ideas

SF56A
785261.492

n_d = 1.78470	ν_d = 26.08	$n_F - n_C$ = 0.030092
n_e = 1.79180	ν_e = 25.87	$n_{F'} - n_{C'}$ = 0.030603

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.73406
$n_{1970.1}$	1970.1	1.73925
$n_{1529.6}$	1529.6	1.74559
$n_{1060.0}$	1060.0	1.75473
n_t	1014.0	1.75606
n_s	852.1	1.76220
n_r	706.5	1.77136
n_C	656.3	1.77605
$n_{C'}$	643.8	1.77740
$n_{632.8}$	632.8	1.77866
n_D	589.3	1.78444
n_d	587.6	1.78470
n_e	546.1	1.79180
n_F	486.1	1.80615
$n_{F'}$	480.0	1.80800
n_g	435.8	1.82449
n_h	404.7	1.84092
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	1.705792590
B_2	0.344223052
B_3	1.096018280
C_1	0.013387470
C_2	0.0579561608
C_3	121.61602400

Constants of Formula for dn/dT

D_0	6.02E-06
D_1	1.70E-08
D_2	-2.61E-11
E_0	1.63E-06
E_1	1.59E-09
λ_{TK} [µm]	0.269

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.870	0.700
2325	0.900	0.760
1970	0.967	0.920
1530	0.996	0.989
1060	0.999	0.997
700	0.998	0.995
660	0.997	0.993
620	0.998	0.994
580	0.998	0.994
546	0.998	0.994
500	0.996	0.989
460	0.990	0.974
436	0.980	0.950
420	0.959	0.900
405	0.900	0.760
400	0.860	0.680
390	0.700	0.410
380	0.400	0.100
370	0.120	0.010
365	0.040	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	42/37

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2040
$P_{C,s}$	0.4605
$P_{d,C}$	0.2874
$P_{e,d}$	0.2359
$P_{g,F}$	0.6098
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2006
$P'_{C',s}$	0.4967
$P'_{d,C'}$	0.2387
$P'_{e,d}$	0.2319
$P'_{g,F'}$	0.5390
$P'_{i,h}$	

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

$\Delta P_{C,t}$	-0.0042
$\Delta P_{C,s}$	-0.0032
$\Delta P_{F,e}$	0.0021
$\Delta P_{g,F}$	0.0098
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	1
SR	3.2
AR	2.2
PR	3.2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.9
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.8
T_g [°C]	429
$T_{10^{13}}$ [°C]	426
$T_{10^{7.6}}$ [°C]	556
c_p [J/(g*K)]	0.400
λ [W/(m•K)]	0.690
ρ [g/cm³]	4.92
E [10^3 N/mm²]	57
µ	0.239
K [10^{-6} mm²/N]	1.10
$HK_{0.1/20}$	380
HG	1

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	5.6	9.0	13.1	3.3	6.6	10.6
+20/+40	6.2	10.0	14.7	4.7	8.5	13.1
+60/+80	6.6	10.7	15.8	5.5	9.5	14.5

Datasheet

SCHOTT
glass made of ideas

SF57
847238.551

n_d = 1.84666	ν_d = 23.83	$n_F - n_C$ = 0.035536
n_e = 1.85504	ν_e = 23.64	$n_{F'} - n_{C'}$ = 0.036166

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.79026
$n_{1970.1}$	1970.1	1.79539
$n_{1529.6}$	1529.6	1.80187
$n_{1060.0}$	1060.0	1.81185
n_t	1014.0	1.81335
n_s	852.1	1.82038
n_r	706.5	1.83102
n_C	656.3	1.83650
$n_{C'}$	643.8	1.83808
$n_{632.8}$	632.8	1.83957
n_D	589.3	1.84636
n_d	587.6	1.84666
n_e	546.1	1.85504
n_F	486.1	1.87204
$n_{F'}$	480.0	1.87425
n_g	435.8	1.89393
n_h	404.7	1.91366
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	1.816513710
B_2	0.428893641
B_3	1.071862780
C_1	0.014370420
C_2	0.0592801172
C_3	121.41994200

Constants of Formula for dn/dT

D_0	7.26E-06
D_1	1.88E-08
D_2	-5.14E-11
E_0	1.96E-06
E_1	1.79E-09
λ_{TK} [µm]	0.276

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.890	0.750
2325	0.910	0.790
1970	0.971	0.930
1530	0.996	0.991
1060	0.999	0.997
700	0.998	0.996
660	0.998	0.994
620	0.998	0.994
580	0.998	0.994
546	0.998	0.994
500	0.994	0.986
460	0.987	0.968
436	0.971	0.930
420	0.940	0.860
405	0.880	0.730
400	0.850	0.660
390	0.730	0.450
380	0.520	0.200
370	0.160	0.010
365	0.040	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	40/37

Remarks

lead containing glass type

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.1976
$P_{C,s}$	0.4539
$P_{d,C}$	0.2859
$P_{e,d}$	0.2356
$P_{g,F}$	0.6160
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.1942
$P'_{C',s}$	0.4895
$P'_{d,C'}$	0.2373
$P'_{e,d}$	0.2315
$P'_{g,F'}$	0.5443
$P'_{i,h}$	

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

$\Delta P_{C,t}$	-0.0065
$\Delta P_{C,s}$	-0.0046
$\Delta P_{F,e}$	0.0026
$\Delta P_{g,F}$	0.0123
$\Delta P_{i,g}$	

Chemical Properties

CR	2
FR	5
SR	52.3
AR	2.3
PR	4.3
SR-J	6
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.2
T_g [°C]	414
$T_{10^{13}}$ [°C]	414
$T_{10^{7.6}}$ [°C]	507
c_p [J/(g*K)]	0.360
λ [W/(m•K)]	0.620
AT [°C]	449
ρ [g/cm^3]	5.51
E [10^3 N/mm^2]	54
µ	0.248
K [10^{-6} mm^2/N]	0.02
$HK_{0.1/20}$	350
HG	1
Abrasion Aa	344

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	6.6	11.1	16.7	4.2	8.6	14.1
+20/+40	7.6	12.5	18.9	6.0	10.9	17.2
+60/+80	8.0	13.4	20.1	6.8	12.1	18.8

Datasheet

SF57HTultra
847238.551

n_d = 1.84666	ν_d = 23.83	$n_F - n_C$ = 0.035536
n_e = 1.85504	ν_e = 23.64	$n_{F'} - n_{C'}$ = 0.036166

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.79026
$n_{1970.1}$	1970.1	1.79539
$n_{1529.6}$	1529.6	1.80187
$n_{1060.0}$	1060.0	1.81185
n_t	1014.0	1.81335
n_s	852.1	1.82038
n_r	706.5	1.83102
n_C	656.3	1.83650
$n_{C'}$	643.8	1.83808
$n_{632.8}$	632.8	1.83957
n_D	589.3	1.84636
n_d	587.6	1.84666
n_e	546.1	1.85504
n_F	486.1	1.87204
$n_{F'}$	480.0	1.87425
n_g	435.8	1.89393
n_h	404.7	1.91366
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	1.816513710
B_2	0.428893641
B_3	1.071862780
C_1	0.014370420
C_2	0.0592801172
C_3	121.41994200

Constants of Formula for dn/dT

D_0	7.26E-06
D_1	1.88E-08
D_2	-5.14E-11
E_0	1.96E-06
E_1	1.79E-09
λ_{TK} [µm]	0.276

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.91	0.80
2325	0.93	0.84
1970	0.980	0.951
1530	0.998	0.994
1060	0.999	0.999
700	0.999	0.997
660	0.998	0.996
620	0.998	0.996
580	0.998	0.996
546	0.998	0.995
500	0.996	0.989
460	0.991	0.978
436	0.985	0.962
420	0.971	0.93
405	0.94	0.86
400	0.92	0.82
390	0.83	0.63
380	0.62	0.30
370	0.25	0.03
365	0.10	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	39/36

Remarks

lead containing glass type

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.1976
$P_{C,s}$	0.4539
$P_{d,C}$	0.2859
$P_{e,d}$	0.2356
$P_{g,F}$	0.6160
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.1942
$P'_{C',s}$	0.4895
$P'_{d,C'}$	0.2373
$P'_{e,d}$	0.2315
$P'_{g,F'}$	0.5443
$P'_{i,h}$	

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

$\Delta P_{C,t}$	-0.0065
$\Delta P_{C,s}$	-0.0046
$\Delta P_{F,e}$	0.0026
$\Delta P_{g,F}$	0.0123
$\Delta P_{i,g}$	

Chemical Properties

CR	2
FR	5
SR	52.3
AR	2.3
PR	4.3
SR-J	6
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.2
T_g [°C]	414
$T_{10^{13}}$ [°C]	414
$T_{10^{7.6}}$ [°C]	507
c_p [J/(g*K)]	0.360
λ [W/(m•K)]	0.620
AT [°C]	449
ρ [g/cm^3]	5.51
E [10^3 N/mm^2]	54
µ	0.248
K [10^{-6} mm^2/N]	0.02
$HK_{0.1/20}$	350
HG	1
Abrasion Aa	344

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	6.6	11.1	16.7	4.2	8.6	14.1
+20/+40	7.6	12.5	18.9	6.0	10.9	17.2
+60/+80	8.0	13.4	20.1	6.8	12.1	18.8

Datasheet

SCHOTT
glass made of ideas

N-KZFS11
638424.320

n_d = 1.63775	ν_d = 42.41	$n_F - n_C$ = 0.015038
n_e = 1.64132	ν_e = 42.20	$n_{F'} - n_{C'}$ = 0.015198

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.59699
$n_{1970.1}$	1970.1	1.60439
$n_{1529.6}$	1529.6	1.61223
$n_{1060.0}$	1060.0	1.62044
n_t	1014.0	1.62139
n_s	852.1	1.62540
n_r	706.5	1.63069
n_C	656.3	1.63324
$n_{C'}$	643.8	1.63395
$n_{632.8}$	632.8	1.63462
n_D	589.3	1.63762
n_d	587.6	1.63775
n_e	546.1	1.64132
n_F	486.1	1.64828
$n_{F'}$	480.0	1.64915
n_g	435.8	1.65670
n_h	404.7	1.66385
n_i	365.0	1.67636
$n_{334.1}$	334.1	1.69037
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.332224500
B_2	0.289241610
B_3	1.151617340
C_1	0.008402985
C_2	0.0344239720
C_3	88.43105320

Constants of Formula for dn/dT

D_0	3.34E-06
D_1	1.16E-08
D_2	-1.80E-11
E_0	6.32E-07
E_1	7.21E-10
λ_{TK} [µm]	0.206

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.510	0.180
2325	0.780	0.540
1970	0.965	0.910
1530	0.991	0.977
1060	0.999	0.999
700	0.998	0.994
660	0.997	0.992
620	0.997	0.992
580	0.997	0.992
546	0.997	0.993
500	0.996	0.989
460	0.993	0.982
436	0.991	0.978
420	0.990	0.975
405	0.988	0.971
400	0.987	0.968
390	0.983	0.957
380	0.976	0.940
370	0.963	0.910
365	0.950	0.880
350	0.880	0.730
334	0.730	0.450
320	0.470	0.150
310	0.230	0.020
300	0.050	
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	36/30

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2664
$P_{C,s}$	0.5212
$P_{d,C}$	0.3000
$P_{e,d}$	0.2377
$P_{g,F}$	0.5605
$P_{i,h}$	0.8319

Relative Partial Dispersion P'

$P'_{s,t}$	0.2636
$P'_{C',s}$	0.5627
$P'_{d,C'}$	0.2499
$P'_{e,d}$	0.2352
$P'_{g,F'}$	0.4971
$P'_{i,h}$	0.8232

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

$\Delta P_{C,t}$	0.0415
$\Delta P_{C,s}$	0.0194
$\Delta P_{F,e}$	-0.0039
$\Delta P_{g,F}$	-0.0120
$\Delta P_{i,g}$	-0.0617

Chemical Properties

CR	1
FR	1
SR	3.4
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.6
T_g [°C]	551
$T_{10^{13}}$ [°C]	554
$T_{10^{7.6}}$ [°C]	
c_p [J/(g*K)]	0.690
λ [W/(m•K)]	0.810
ρ [g/cm³]	3.20
E [10^3 N/mm²]	79
µ	0.251
K [10^{-6} mm²/N]	4.21
$HK_{0.1/20}$	530
HG	3
Abrasion Aa	74

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	3.5	4.4	5.4	1.3	2.2	3.1
+20/+40	3.5	4.6	5.7	2.1	3.1	4.2
+60/+80	3.6	4.8	6.0	2.5	3.7	4.8

Datasheet

SCHOTT
glass made of ideas

N-KZFS2
558540.254

n_d = 1.55836	ν_d = 54.01	$n_F - n_C$ = 0.010338
n_e = 1.56082	ν_e = 53.83	$n_{F'} - n_{C'}$ = 0.010418

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.52239
$n_{1970.1}$	1970.1	1.53011
$n_{1529.6}$	1529.6	1.53798
$n_{1060.0}$	1060.0	1.54546
n_t	1014.0	1.54625
n_s	852.1	1.54944
n_r	706.5	1.55337
n_C	656.3	1.55519
$n_{C'}$	643.8	1.55570
$n_{632.8}$	632.8	1.55617
n_D	589.3	1.55827
n_d	587.6	1.55836
n_e	546.1	1.56082
n_F	486.1	1.56553
$n_{F'}$	480.0	1.56612
n_g	435.8	1.57114
n_h	404.7	1.57580
n_i	365.0	1.58382
$n_{334.1}$	334.1	1.59259
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.236975540
B_2	0.153569376
B_3	0.903976272
C_1	0.007471705
C_2	0.0308053556
C_3	70.17310840

Constants of Formula for dn/dT

D_0	6.77E-06
D_1	1.31E-08
D_2	-1.23E-11
E_0	3.84E-07
E_1	5.51E-10
λ_{TK} [µm]	0.196

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.28	0.04
2325	0.58	0.26
1970	0.91	0.80
1530	0.976	0.94
1060	0.996	0.991
700	0.998	0.996
660	0.998	0.994
620	0.998	0.994
580	0.998	0.994
546	0.998	0.994
500	0.997	0.992
460	0.995	0.987
436	0.992	0.981
420	0.990	0.975
405	0.987	0.967
400	0.985	0.963
390	0.980	0.950
380	0.971	0.93
370	0.963	0.91
365	0.954	0.89
350	0.91	0.80
334	0.81	0.59
320	0.57	0.24
310	0.25	0.03
300	0.01	
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	34/30

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.3080
$P_{C,s}$	0.5568
$P_{d,C}$	0.3061
$P_{e,d}$	0.2383
$P_{g,F}$	0.5419
$P_{i,h}$	0.7758

Relative Partial Dispersion P'

$P'_{s,t}$	0.3056
$P'_{C',s}$	0.6011
$P'_{d,C'}$	0.2552
$P'_{e,d}$	0.2365
$P'_{g,F'}$	0.4814
$P'_{i,h}$	0.7699

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

$\Delta P_{C,t}$	0.0636
$\Delta P_{C,s}$	0.0280
$\Delta P_{F,e}$	-0.0044
$\Delta P_{g,F}$	-0.0111
$\Delta P_{i,g}$	-0.0440

Chemical Properties

CR	1
FR	4
SR	52.3
AR	4.3
PR	4.2
SR-J	6
WR-J	6

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	4.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	5.4
T_g [°C]	482
$T_{10^{13}}$ [°C]	488
$T_{10^{7.6}}$ [°C]	590
c_p [J/(g*K)]	0.830
λ [W/(m•K)]	0.810
AT [°C]	533
ρ [g/cm^3]	2.54
E [10^3 N/mm^2]	66
µ	0.266
K [10^{-6} mm^2/N]	3.98
$HK_{0.1/20}$	490
HG	3
Abrasion Aa	70

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	4.6	5.2	5.7	2.5	3.0	3.5
+20/+40	4.7	5.3	5.9	3.3	3.9	4.5
+60/+80	4.8	5.5	6.2	3.8	4.5	5.1

Datasheet

SCHOTT
glass made of ideas

N-KZFS4
613445.300

n_d = 1.61336	ν_d = 44.49	$n_F - n_C$ = 0.013785
n_e = 1.61664	ν_e = 44.27	$n_{F'} - n_{C'}$ = 0.013929

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.57535
$n_{1970.1}$	1970.1	1.58233
$n_{1529.6}$	1529.6	1.58971
$n_{1060.0}$	1060.0	1.59739
n_t	1014.0	1.59828
n_s	852.1	1.60199
n_r	706.5	1.60688
n_C	656.3	1.60922
$n_{C'}$	643.8	1.60987
$n_{632.8}$	632.8	1.61049
n_D	589.3	1.61324
n_d	587.6	1.61336
n_e	546.1	1.61664
n_F	486.1	1.62300
$n_{F'}$	480.0	1.62380
n_g	435.8	1.63071
n_h	404.7	1.63723
n_i	365.0	1.64865
$n_{334.1}$	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	1.350554240
B_2	0.197575506
B_3	1.099629920
C_1	0.008762821
C_2	0.0371767201
C_3	90.38669940

Constants of Formula for dn/dT

D_0	1.81E-06
D_1	1.16E-08
D_2	-7.99E-12
E_0	6.20E-07
E_1	7.94E-10
λ_{TK} [µm]	0.205

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.510	0.190
2325	0.750	0.490
1970	0.951	0.880
1530	0.984	0.961
1060	0.998	0.996
700	0.998	0.994
660	0.997	0.993
620	0.997	0.992
580	0.997	0.993
546	0.997	0.992
500	0.995	0.987
460	0.990	0.976
436	0.987	0.968
420	0.984	0.961
405	0.981	0.952
400	0.979	0.950
390	0.971	0.930
380	0.963	0.910
370	0.940	0.860
365	0.920	0.820
350	0.820	0.600
334	0.470	0.150
320	0.040	
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	36/32

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2694
$P_{C,s}$	0.5240
$P_{d,C}$	0.3006
$P_{e,d}$	0.2378
$P_{g,F}$	0.5590
$P_{i,h}$	0.8284

Relative Partial Dispersion P'

$P'_{s,t}$	0.2666
$P'_{C',s}$	0.5657
$P'_{d,C'}$	0.2503
$P'_{e,d}$	0.2353
$P'_{g,F'}$	0.4958
$P'_{i,h}$	0.8199

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

$\Delta P_{C,t}$	0.0373
$\Delta P_{C,s}$	0.0173
$\Delta P_{F,e}$	-0.0033
$\Delta P_{g,F}$	-0.0100
$\Delta P_{i,g}$	-0.0496

Chemical Properties

CR	1
FR	1
SR	3.4
AR	1.2
PR	1
SR-J	6
WR-J	4

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.2
T_g [°C]	536
$T_{10^{13}}$ [°C]	541
$T_{10^{7.6}}$ [°C]	664
c_p [J/(g*K)]	0.760
λ [W/(m•K)]	0.840
AT [°C]	597
ρ [g/cm^3]	3.00
E [10^3 N/mm^2]	78
µ	0.241
K [10^{-6} mm^2/N]	3.90
$HK_{0.1/20}$	520
HG	3
Abrasion Aa	130

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	2.7	3.5	4.4	0.5	1.3	2.2
+20/+40	2.7	3.7	4.7	1.3	2.3	3.2
+60/+80	2.8	3.9	5.0	1.7	2.8	3.9

Datasheet

SCHOTT
glass made of ideas

N-KZFS4HT
613445.300

n_d = 1.61336	ν_d = 44.49	$n_F - n_C$ = 0.013785
n_e = 1.61664	ν_e = 44.27	$n_{F'} - n_{C'}$ = 0.013929

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.57535
$n_{1970.1}$	1970.1	1.58233
$n_{1529.6}$	1529.6	1.58971
$n_{1060.0}$	1060.0	1.59739
n_t	1014.0	1.59828
n_s	852.1	1.60199
n_r	706.5	1.60688
n_C	656.3	1.60922
$n_{C'}$	643.8	1.60987
$n_{632.8}$	632.8	1.61049
n_D	589.3	1.61324
n_d	587.6	1.61336
n_e	546.1	1.61664
n_F	486.1	1.62300
$n_{F'}$	480.0	1.62380
n_g	435.8	1.63071
n_h	404.7	1.63723
n_i	365.0	1.64865
$n_{334.1}$	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	1.350554240
B_2	0.197575506
B_3	1.099629920
C_1	0.008762821
C_2	0.0371767201
C_3	90.38669940

Constants of Formula for dn/dT

D_0	1.81E-06
D_1	1.16E-08
D_2	-7.99E-12
E_0	6.20E-07
E_1	7.94E-10
λ_{TK} [µm]	0.205

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.510	0.190
2325	0.750	0.490
1970	0.951	0.880
1530	0.984	0.961
1060	0.999	0.999
700	0.998	0.994
660	0.997	0.993
620	0.997	0.992
580	0.997	0.993
546	0.997	0.993
500	0.995	0.988
460	0.992	0.980
436	0.990	0.975
420	0.988	0.971
405	0.986	0.966
400	0.985	0.962
390	0.980	0.951
380	0.973	0.930
370	0.959	0.900
365	0.950	0.870
350	0.870	0.700
334	0.550	0.220
320	0.060	0.000
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	36/32

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2694
$P_{C,s}$	0.5240
$P_{d,C}$	0.3006
$P_{e,d}$	0.2378
$P_{g,F}$	0.5590
$P_{i,h}$	0.8284

Relative Partial Dispersion P'

$P'_{s,t}$	0.2666
$P'_{C',s}$	0.5657
$P'_{d,C'}$	0.2503
$P'_{e,d}$	0.2353
$P'_{g,F'}$	0.4958
$P'_{i,h}$	0.8199

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

$\Delta P_{C,t}$	0.0373
$\Delta P_{C,s}$	0.0173
$\Delta P_{F,e}$	-0.0033
$\Delta P_{g,F}$	-0.0100
$\Delta P_{i,g}$	-0.0496

Chemical Properties

CR	1
FR	1
SR	3.4
AR	1.2
PR	1
SR-J	6
WR-J	4

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.2
T_g [°C]	536
$T_{10^{13}}$ [°C]	541
$T_{10^{7.6}}$ [°C]	664
c_p [J/(g*K)]	0.760
λ [W/(m•K)]	0.840
AT [°C]	597
ρ [g/cm^3]	3.00
E [10^3 N/mm^2]	78
µ	0.241
K [10^{-6} mm^2/N]	3.90
$HK_{0.1/20}$	520
HG	3
Abrasion Aa	130

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	2.7	3.5	4.4	0.5	1.3	2.2
+20/+40	2.7	3.7	4.7	1.3	2.3	3.2
+60/+80	2.8	3.9	5.0	1.7	2.8	3.9

Datasheet

SCHOTT
glass made of ideas

N-KZFS5
654397.304

n_d = 1.65412	ν_d = 39.70	$n_F - n_C$ = 0.016477
n_e = 1.65803	ν_e = 39.46	$n_{F'} - n_{C'}$ = 0.016675

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.61392
$n_{1970.1}$	1970.1	1.62058
$n_{1529.6}$	1529.6	1.62780
$n_{1060.0}$	1060.0	1.63577
n_t	1014.0	1.63673
n_s	852.1	1.64087
n_r	706.5	1.64649
n_C	656.3	1.64922
$n_{C'}$	643.8	1.65000
$n_{632.8}$	632.8	1.65072
n_D	589.3	1.65398
n_d	587.6	1.65412
n_e	546.1	1.65803
n_F	486.1	1.66570
$n_{F'}$	480.0	1.66667
n_g	435.8	1.67511
n_h	404.7	1.68318
n_i	365.0	1.69756
$n_{334.1}$	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	1.474607890
B_2	0.193584488
B_3	1.265899740
C_1	0.009861438
C_2	0.0445477583
C_3	106.43625800

Constants of Formula for dn/dT

D_0	4.54E-06
D_1	1.19E-08
D_2	2.93E-12
E_0	6.89E-07
E_1	8.60E-10
λ_{TK} [µm]	0.230

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.66	0.35
2325	0.83	0.62
1970	0.963	0.91
1530	0.988	0.970
1060	0.999	0.998
700	0.998	0.994
660	0.997	0.992
620	0.997	0.992
580	0.997	0.993
546	0.997	0.992
500	0.994	0.985
460	0.990	0.974
436	0.986	0.965
420	0.983	0.958
405	0.978	0.95
400	0.976	0.94
390	0.967	0.92
380	0.950	0.88
370	0.93	0.83
365	0.91	0.79
350	0.79	0.56
334	0.37	0.08
320	0.02	0.00
310	0.00	
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	37/32

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2511
$P_{C,s}$	0.5070
$P_{d,C}$	0.2972
$P_{e,d}$	0.2374
$P_{g,F}$	0.5710
$P_{i,h}$	0.8729

Relative Partial Dispersion P'

$P'_{s,t}$	0.2481
$P'_{C',s}$	0.5473
$P'_{d,C'}$	0.2474
$P'_{e,d}$	0.2345
$P'_{g,F'}$	0.5060
$P'_{i,h}$	0.8625

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

$\Delta P_{C,t}$	0.0248
$\Delta P_{C,s}$	0.0115
$\Delta P_{F,e}$	-0.0021
$\Delta P_{g,F}$	-0.0060
$\Delta P_{i,g}$	-0.0286

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1
SR-J	1
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.4
T_g [°C]	584
$T_{10^{13}}$ [°C]	593
$T_{10^{7.6}}$ [°C]	739
c_p [J/(g*K)]	0.730
λ [W/(m•K)]	0.950
AT [°C]	648
ρ [g/cm^3]	3.04
E [10^3 N/mm^2]	89
µ	0.243
K [10^{-6} mm^2/N]	3.53
$HK_{0.1/20}$	555
Abrasion Aa	122

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	4.2	5.3	6.5	2.0	3.1	4.2
+20/+40	4.2	5.5	6.8	2.8	4.0	5.4
+60/+80	4.4	5.8	7.3	3.3	4.7	6.1

Datasheet

SCHOTT
glass made of ideas

N-KZFS8
720347.320

n_d = 1.72047	ν_d = 34.70	$n_F - n_C$ = 0.020763
n_e = 1.72539	ν_e = 34.47	$n_{F'} - n_{C'}$ = 0.021046

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.67524
$n_{1970.1}$	1970.1	1.68193
$n_{1529.6}$	1529.6	1.68939
$n_{1060.0}$	1060.0	1.69816
n_t	1014.0	1.69927
n_s	852.1	1.70416
n_r	706.5	1.71099
n_C	656.3	1.71437
$n_{C'}$	643.8	1.71532
$n_{632.8}$	632.8	1.71622
n_D	589.3	1.72029
n_d	587.6	1.72047
n_e	546.1	1.72539
n_F	486.1	1.73513
$n_{F'}$	480.0	1.73637
n_g	435.8	1.74724
n_h	404.7	1.75777
n_i	365.0	1.77690
$n_{334.1}$	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	1.626936510
B_2	0.243698760
B_3	1.620071410
C_1	0.010880863
C_2	0.0494207753
C_3	131.00916300

Constants of Formula for dn/dT

D_0	7.93E-07
D_1	6.47E-09
D_2	-5.00E-12
E_0	7.71E-07
E_1	1.01E-09
λ_{TK} [µm]	0.254

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.760	0.510
2325	0.870	0.700
1970	0.967	0.920
1530	0.993	0.983
1060	0.999	0.999
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.995
546	0.997	0.993
500	0.994	0.985
460	0.988	0.971
436	0.982	0.955
420	0.976	0.940
405	0.967	0.920
400	0.963	0.910
390	0.950	0.870
380	0.920	0.820
370	0.890	0.740
365	0.860	0.680
350	0.670	0.360
334	0.140	0.010
320	0.040	0.000
310	0.000	
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	38/33

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2353
$P_{C,s}$	0.4916
$P_{d,C}$	0.2940
$P_{e,d}$	0.2369
$P_{g,F}$	0.5833
$P_{i,h}$	0.9212

Relative Partial Dispersion P'

$P'_{s,t}$	0.2322
$P'_{C',s}$	0.5305
$P'_{d,C'}$	0.2445
$P'_{e,d}$	0.2337
$P'_{g,F'}$	0.5165
$P'_{i,h}$	0.9088

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

$\Delta P_{C,t}$	0.0173
$\Delta P_{C,s}$	0.0078
$\Delta P_{F,e}$	-0.0011
$\Delta P_{g,F}$	-0.0021
$\Delta P_{i,g}$	-0.0048

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1
SR-J	1
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.4
T_g [°C]	509
$T_{10^{13}}$ [°C]	515
$T_{10^{7.6}}$ [°C]	635
c_p [J/(g*K)]	0.760
λ [W/(m•K)]	1.050
AT [°C]	561
ρ [g/cm^3]	3.20
E [10^3 N/mm^2]	103
µ	0.248
K [10^{-6} mm^2/N]	2.94
$HK_{0.1/20}$	570
HG	4
Abrasion Aa	152

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	2.7	4.1	5.6	0.4	1.7	3.2
+20/+40	2.4	4.0	5.8	0.9	2.5	4.2
+60/+80	2.4	4.1	6.1	1.2	2.9	4.9

Datasheet

SCHOTT
glass made of ideas

BK7G18
520636.252

n_d = 1.51975	ν_d = 63.58	$n_F - n_C$ = 0.008174
n_e = 1.52170	ν_e = 63.36	$n_{F'} - n_{C'}$ = 0.008233

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.49203
$n_{1970.1}$	1970.1	1.49777
$n_{1529.6}$	1529.6	1.50373
$n_{1060.0}$	1060.0	1.50953
n_t	1014.0	1.51015
n_s	852.1	1.51267
n_r	706.5	1.51579
n_C	656.3	1.51724
$n_{C'}$	643.8	1.51764
$n_{632.8}$	632.8	1.51802
n_D	589.3	1.51968
n_d	587.6	1.51975
n_e	546.1	1.52170
n_F	486.1	1.52541
$n_{F'}$	480.0	1.52587
n_g	435.8	1.52981
n_h	404.7	1.53345
n_i	365.0	1.53970
$n_{334.1}$	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	1.265385420
B_2	0.014419107
B_3	1.003230280
C_1	0.008131041
C_2	0.0543303226
C_3	102.82116600

Constants of Formula for dn/dT

D_0	1.52E-06
D_1	1.37E-08
D_2	-1.26E-11
E_0	4.36E-07
E_1	4.17E-10
λ_{TK} [µm]	0.194

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.630	0.320
2325	0.780	0.540
1970	0.930	0.840
1530	0.992	0.979
1060	0.999	0.998
700	0.997	0.993
660	0.995	0.988
620	0.994	0.984
580	0.992	0.979
546	0.989	0.973
500	0.982	0.957
460	0.970	0.930
436	0.950	0.870
420	0.910	0.780
405	0.820	0.600
400	0.760	0.510
390	0.600	0.280
380	0.360	0.080
370	0.080	
365	0.020	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	41/37

Remarks

radiation resistant glass

Relative Partial Dispersion P

$P_{s,t}$	0.3077
$P_{C,s}$	0.5591
$P_{d,C}$	0.3071
$P_{e,d}$	0.2385
$P_{g,F}$	0.5376
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.3055
$P'_{C',s}$	0.6040
$P'_{d,C'}$	0.2561
$P'_{e,d}$	0.2368
$P'_{g,F'}$	0.4777
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0203
$\Delta P_{C,s}$	0.0080
$\Delta P_{F,e}$	-0.0006
$\Delta P_{g,F}$	0.0007
$\Delta P_{i,g}$	

Chemical Properties

CR	
FR	0
SR	1
AR	2
PR	

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.2
T_g [°C]	585
$T_{10^{13}}$ [°C]	570
$T_{10^{7.6}}$ [°C]	722
c_p [J/(g*K)]	0.820
λ [W/(m•K)]	1.190
ρ [g/cm³]	2.52
E [10^3 N/mm²]	82
µ	0.205
K [10^{-6} mm²/N]	2.77
$HK_{0.1/20}$	580

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	2.2	2.7	3.3	0.2	0.7	1.2
+20/+40	2.2	2.8	3.4	0.9	1.5	2.1
+60/+80	2.4	3.0	3.7	1.4	2.0	2.6

Datasheet

SCHOTT
glass made of ideas

F2G12
621366.361

n_d = 1.62072	ν_d = 36.56	$n_F - n_C$ = 0.016979
n_e = 1.62474	ν_e = 36.30	$n_{F'} - n_{C'}$ = 0.017212

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.58584
$n_{1970.1}$	1970.1	1.59051
$n_{1529.6}$	1529.6	1.59593
$n_{1060.0}$	1060.0	1.60265
n_t	1014.0	1.60353
n_s	852.1	1.60744
n_r	706.5	1.61298
n_C	656.3	1.61573
$n_{C'}$	643.8	1.61652
$n_{632.8}$	632.8	1.61725
n_D	589.3	1.62057
n_d	587.6	1.62072
n_e	546.1	1.62474
n_F	486.1	1.63271
$n_{F'}$	480.0	1.63373
n_g	435.8	1.64261
n_h	404.7	1.65121
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	1.347022240
B_2	0.210037763
B_3	19.535076800
C_1	0.009808506
C_2	0.0471788018
C_3	2279.15470000

Constants of Formula for dn/dT

D_0	2.19E-06
D_1	1.62E-08
D_2	-2.20E-11
E_0	9.55E-07
E_1	8.12E-10
λ_{TK} [µm]	0.250

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.84	0.65
2325	0.89	0.74
1970	0.959	0.90
1530	0.996	0.989
1060	0.999	0.997
700	0.995	0.988
660	0.994	0.984
620	0.992	0.979
580	0.989	0.972
546	0.981	0.953
500	0.967	0.92
460	0.92	0.81
436	0.80	0.58
420	0.62	0.30
405	0.35	0.07
400	0.25	0.03
390	0.12	0.00
380	0.02	
370	0.00	
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	46/39

Remarks

radiation resistant glass

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2303
$P_{C,s}$	0.4883
$P_{d,C}$	0.2937
$P_{e,d}$	0.2369
$P_{g,F}$	0.5831
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2272
$P'_{C',s}$	0.5271
$P'_{d,C'}$	0.2443
$P'_{e,d}$	0.2337
$P'_{g,F'}$	0.5163
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0002
$\Delta P_{C,s}$	0.0002
$\Delta P_{F,e}$	0.0002
$\Delta P_{g,F}$	0.0008
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1.3
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.3
T_g [°C]	435
T_{10}^{13} [°C]	438
$T_{10}^{7.6}$ [°C]	612
c_p [J/(g*K)]	0.530
λ [W/(m•K)]	0.820
ρ [g/cm³]	3.61
E [10^3 N/mm²]	58
µ	0.222
K [10^{-6} mm²/N]	2.79
$HK_{0.1/20}$	411

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	2.7	4.3	6.0	0.6	2.1	3.8
+20/+40	3.1	4.8	6.7	1.7	3.3	5.2
+60/+80	3.3	5.2	7.2	2.3	4.1	6.1

Datasheet

SCHOTT
glass made of ideas

K5G20
523568.259

n_d = 1.52344	ν_d = 56.76	$n_F - n_C$ = 0.009222
n_e = 1.52564	ν_e = 56.47	$n_{F'} - n_{C'}$ = 0.009308

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.49784
$n_{1970.1}$	1970.1	1.50236
$n_{1529.6}$	1529.6	1.50730
$n_{1060.0}$	1060.0	1.51258
n_t	1014.0	1.51319
n_s	852.1	1.51573
n_r	706.5	1.51906
n_C	656.3	1.52065
$n_{C'}$	643.8	1.52109
$n_{632.8}$	632.8	1.52151
n_D	589.3	1.52336
n_d	587.6	1.52344
n_e	546.1	1.52564
n_F	486.1	1.52987
$n_{F'}$	480.0	1.53040
n_g	435.8	1.53494
n_h	404.7	1.53919
n_i	365.0	1.54651
$n_{334.1}$	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	1.140943960
B_2	0.145001190
B_3	37.470578600
C_1	0.006949455
C_2	0.0310574444
C_3	4536.25624000

Constants of Formula for dn/dT

D_0	-2.22E-06
D_1	8.45E-09
D_2	-3.31E-11
E_0	5.44E-07
E_1	4.95E-10
λ_{TK} [µm]	0.214

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.630	0.320
2325	0.730	0.460
1970	0.900	0.760
1530	0.990	0.976
1060	0.998	0.995
700	0.997	0.992
660	0.995	0.987
620	0.994	0.985
580	0.993	0.982
546	0.990	0.976
500	0.984	0.961
460	0.971	0.930
436	0.954	0.890
420	0.920	0.820
405	0.860	0.680
400	0.820	0.610
390	0.690	0.390
380	0.440	0.130
370	0.130	0.000
365	0.030	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	41/37

Remarks

radiation resistant glass

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2764
$P_{C,s}$	0.5327
$P_{d,C}$	0.3027
$P_{e,d}$	0.2382
$P_{g,F}$	0.5500
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2738
$P'_{C',s}$	0.5755
$P'_{d,C'}$	0.2523
$P'_{e,d}$	0.2360
$P'_{g,F'}$	0.4881
$P'_{i,h}$	

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

$\Delta P_{C,t}$	-0.0051
$\Delta P_{C,s}$	-0.0025
$\Delta P_{F,e}$	0.0005
$\Delta P_{g,F}$	0.0017
$\Delta P_{i,g}$	

Chemical Properties

CR	
FR	0
SR	1
AR	1
PR	

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.3
T_g [°C]	483
$T_{10^{13}}$ [°C]	501
$T_{10^{7.6}}$ [°C]	679
c_p [J/(g*K)]	0.790
λ [W/(m•K)]	1.000
ρ [g/cm³]	2.59
E [10^3 N/mm²]	68
µ	0.222
K [10^{-6} mm²/N]	
$HK_{0.1/20}$	510

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	0.8	1.5	2.2	-1.2	-0.6	0.1
+20/+40	0.6	1.4	2.1	-0.7	0.1	0.8
+60/+80	0.6	1.4	2.2	-0.5	0.3	1.1

Datasheet

LAK9G15
691548.353

n_d = 1.69064	ν_d = 54.76	$n_F - n_C$ = 0.012612
n_e = 1.69364	ν_e = 54.53	$n_{F'} - n_{C'}$ = 0.012721

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.65362
$n_{1970.1}$	1970.1	1.66043
$n_{1529.6}$	1529.6	1.66783
$n_{1060.0}$	1060.0	1.67552
n_t	1014.0	1.67639
n_s	852.1	1.67999
n_r	706.5	1.68462
n_C	656.3	1.68680
$n_{C'}$	643.8	1.68741
$n_{632.8}$	632.8	1.68798
n_D	589.3	1.69052
n_d	587.6	1.69064
n_e	546.1	1.69364
n_F	486.1	1.69941
$n_{F'}$	480.0	1.70013
n_g	435.8	1.70630
n_h	404.7	1.71205
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	1.287736670
B_2	0.518244853
B_3	26.175610900
C_1	0.005575419
C_2	0.0223679524
C_3	1892.25330000

Constants of Formula for dn/dT

D_0	2.19E-06
D_1	1.16E-08
D_2	-7.71E-12
E_0	4.82E-07
E_1	4.50E-10
λ_{TK} [µm]	0.193

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.48	0.16
2325	0.75	0.49
1970	0.963	0.91
1530	0.995	0.987
1060	0.998	0.996
700	0.994	0.986
660	0.993	0.982
620	0.991	0.978
580	0.989	0.973
546	0.985	0.964
500	0.971	0.93
460	0.92	0.81
436	0.80	0.57
420	0.63	0.32
405	0.38	0.09
400	0.29	0.04
390	0.12	0.01
380	0.03	0.00
370		
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	46/38

Remarks

radiation resistant glass

total allowable cross section of bubbles: 0,1mm² per 100 ccm

Relative Partial Dispersion P

$P_{s,t}$	0.2852
$P_{C,s}$	0.5400
$P_{d,C}$	0.3040
$P_{e,d}$	0.2383
$P_{g,F}$	0.5462
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2828
$P'_{C',s}$	0.5834
$P'_{d,C'}$	0.2533
$P'_{e,d}$	0.2362
$P'_{g,F'}$	0.4849
$P'_{i,h}$	

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

$\Delta P_{C,t}$	0.0205
$\Delta P_{C,s}$	0.0095
$\Delta P_{F,e}$	-0.0018
$\Delta P_{g,F}$	-0.0055
$\Delta P_{i,g}$	

Chemical Properties

CR	45689
FR	2
SR	53
AR	1.3
PR	4.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.6
T_g [°C]	634
$T_{10^{13}}$ [°C]	635
$T_{10^{7.6}}$ [°C]	710
c_p [J/(g*K)]	0.660
λ [W/(m•K)]	0.880
ρ [g/cm³]	3.53
E [10^3 N/mm²]	108
µ	0.288
K [10^{-6} mm²/N]	1.86
$HK_{0.1/20}$	721

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	3.0	3.8	4.5	0.7	1.5	2.1
+20/+40	3.0	3.9	4.7	1.5	2.4	3.2
+60/+80	3.2	4.1	5.0	2.0	2.9	3.8

Datasheet

SCHOTT
glass made of ideas

LF5G19
597399.330

n_d = 1.59655	ν_d = 39.89	$n_F - n_C$ = 0.014954
n_e = 1.60010	ν_e = 39.60	$n_{F'} - n_{C'}$ = 0.015153

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.56416
$n_{1970.1}$	1970.1	1.56890
$n_{1529.6}$	1529.6	1.57419
$n_{1060.0}$	1060.0	1.58045
n_t	1014.0	1.58125
n_s	852.1	1.58477
n_r	706.5	1.58970
n_C	656.3	1.59214
$n_{C'}$	643.8	1.59284
$n_{632.8}$	632.8	1.59349
n_D	589.3	1.59642
n_d	587.6	1.59655
n_e	546.1	1.60010
n_F	486.1	1.60710
$n_{F'}$	480.0	1.60799
n_g	435.8	1.61578
n_h	404.7	1.62330
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	1.346113270
B_2	0.142428018
B_3	0.900477176
C_1	0.009717439
C_2	0.0501911619
C_3	111.95970300

Constants of Formula for dn/dT

D_0	-8.15E-06
D_1	1.34E-08
D_2	-9.22E-12
E_0	8.57E-07
E_1	8.26E-10
λ_{TK} [µm]	0.243

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.530	0.200
2325	0.630	0.320
1970	0.870	0.710
1530	0.992	0.979
1060	0.999	0.998
700	0.997	0.993
660	0.995	0.987
620	0.993	0.983
580	0.991	0.977
546	0.986	0.966
500	0.973	0.930
460	0.930	0.830
436	0.820	0.610
420	0.660	0.350
405	0.380	0.090
400	0.280	0.040
390	0.090	
380		
370		
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	45/39

Remarks

lead containing glass type

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2355
$P_{C,s}$	0.4930
$P_{d,C}$	0.2946
$P_{e,d}$	0.2370
$P_{g,F}$	0.5803
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2324
$P'_{C',s}$	0.5322
$P'_{d,C'}$	0.2451
$P'_{e,d}$	0.2339
$P'_{g,F'}$	0.5139
$P'_{i,h}$	

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

$\Delta P_{C,t}$	-0.0056
$\Delta P_{C,s}$	-0.0028
$\Delta P_{F,e}$	0.0009
$\Delta P_{g,F}$	0.0036
$\Delta P_{i,g}$	

Chemical Properties

CR	44622
FR	2
SR	3.4
AR	2.2
PR	3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	10.7
$\alpha_{+20/+300°C}$ [10^{-6}/K]	11.4
T_g [°C]	474
$T_{10^{13}}$ [°C]	462
$T_{10^{7.6}}$ [°C]	606
c_p [J/(g*K)]	0.580
λ [W/(m•K)]	0.750
ρ [g/cm³]	3.30
E [10^3 N/mm²]	56
µ	0.242
K [10^{-6} mm²/N]	2.80
$HK_{0.1/20}$	410
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	-2.1	-0.9	0.4	-4.2	-3.1	-1.8
+20/+40	-2.0	-0.7	0.8	-3.3	-2.1	-0.6
+60/+80	-1.8	-0.3	1.3	-2.8	-1.4	0.1

Datasheet

SF6G05
809253.520

n_d = 1.80906 ν_d = 25.27 $n_F - n_C$ = 0.032015
n_e = 1.81661 ν_e = 25.07 $n_{F'} - n_{C'}$ = 0.032570

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.75661
$n_{1970.1}$	1970.1	1.76163
$n_{1529.6}$	1529.6	1.76797
$n_{1060.0}$	1060.0	1.77741
n_t	1014.0	1.77879
n_s	852.1	1.78524
n_r	706.5	1.79491
n_C	656.3	1.79988
$n_{C'}$	643.8	1.80131
$n_{632.8}$	632.8	1.80265
n_D	589.3	1.80878
n_d	587.6	1.80906
n_e	546.1	1.81661
n_F	486.1	1.83190
$n_{F'}$	480.0	1.83387
n_g	435.8	
n_h	404.7	
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	1.621139420
B_2	0.506586092
B_3	10.403229800
C_1	0.011347899
C_2	0.0535840223
C_3	1118.83658000

Constants of Formula for dn/dT

D_0	6.90E-06
D_1	1.76E-08
D_2	-3.17E-11
E_0	1.89E-06
E_1	1.50E-09
λ_{TK} [µm]	0.256

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.850	0.660
2325	0.880	0.720
1970	0.965	0.910
1530	0.995	0.987
1060	0.998	0.994
700	0.985	0.962
660	0.980	0.950
620	0.972	0.930
580	0.958	0.900
546	0.920	0.810
500	0.640	0.330
460	0.090	0.080
436		
420		
405		
400		
390		
380		
370		
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	52/46

Remarks

lead containing glass type

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2013
$P_{C,s}$	0.4574
$P_{d,C}$	0.2866
$P_{e,d}$	0.2358
$P_{g,F}$	0.6121
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.1979
$P'_{C',s}$	0.4933
$P'_{d,C'}$	0.2380
$P'_{e,d}$	0.2318
$P'_{g,F'}$	0.5409
$P'_{i,h}$	

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

$\Delta P_{C,t}$	-0.0062
$\Delta P_{C,s}$	-0.0044
$\Delta P_{F,e}$	0.0025
$\Delta P_{g,F}$	0.0108
$\Delta P_{i,g}$	

Chemical Properties

CR	4
FR	3
SR	51.3
AR	2.3
PR	3.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.8
T_g [°C]	427
$T_{10^{13}}$ [°C]	
$T_{10^{7.6}}$ [°C]	529
c_p [J/(g*K)]	
λ [W/(m•K)]	
ρ [g/cm³]	5.20
E [10^3 N/mm²]	
µ	
K [10^{-6} mm²/N]	
$HK_{0.1/20}$	360

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	6.4	10.3		4.0	7.8	
+20/+40	7.0	11.4		5.5	9.8	
+60/+80	7.5	12.1		6.3	10.9	

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70
Казахстан +(727)345-47-04
Беларусь +(375)257-127-884
Узбекистан +998(71)205-18-59
Киргизия +996(312)96-26-47

эл.почта: sqh@nt-rt.ru || сайт: https://schott.nt-rt.ru/