Оптическое стекло BK, K, BAK

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

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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

SCHOTT N-BK7®
517642.251

n_d = 1.51680	ν_d = 64.17	$n_F - n_C$ = 0.008054
n_e = 1.51872	ν_e = 63.96	$n_{F'} - n_{C'}$ = 0.008110

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.48921
$n_{1970.1}$	1970.1	1.49495
$n_{1529.6}$	1529.6	1.50091
$n_{1060.0}$	1060.0	1.50669
n_t	1014.0	1.50731
n_s	852.1	1.50980
n_r	706.5	1.51289
n_C	656.3	1.51432
$n_{C'}$	643.8	1.51472
$n_{632.8}$	632.8	1.51509
n_D	589.3	1.51673
n_d	587.6	1.51680
n_e	546.1	1.51872
n_F	486.1	1.52238
$n_{F'}$	480.0	1.52283
n_g	435.8	1.52668
n_h	404.7	1.53024
n_i	365.0	1.53627
$n_{334.1}$	334.1	1.54272
$n_{312.6}$	312.6	1.54862
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.039612120
B_2	0.231792344
B_3	1.010469450
C_1	0.006000699
C_2	0.0200179144
C_3	103.56065300

Constants of Formula for dn/dT

D_0	1.86E-06
D_1	1.31E-08
D_2	-1.37E-11
E_0	4.34E-07
E_1	6.27E-10
λ_{TK} [µm]	0.170

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.67	0.36
2325	0.79	0.56
1970	0.93	0.84
1530	0.992	0.980
1060	0.999	0.997
700	0.998	0.996
660	0.998	0.994
620	0.998	0.994
580	0.998	0.995
546	0.998	0.996
500	0.998	0.994
460	0.997	0.993
436	0.997	0.992
420	0.997	0.993
405	0.997	0.993
400	0.997	0.992
390	0.996	0.989
380	0.993	0.983
370	0.991	0.977
365	0.988	0.971
350	0.967	0.92
334	0.91	0.78
320	0.77	0.52
310	0.57	0.25
300	0.29	0.05
290	0.06	
280		
270		
260		
250		

Color Code

λ80 / λ5	33/29

Remarks

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.3098
$P_{C,s}$	0.5612
$P_{d,C}$	0.3076
$P_{e,d}$	0.2386
$P_{g,F}$	0.5349
$P_{i,h}$	0.7483

Relative Partial Dispersion P'

$P'_{s,t}$	0.3076
$P'_{C',s}$	0.6062
$P'_{d,C'}$	0.2566
$P'_{e,d}$	0.2370
$P'_{g,F'}$	0.4754
$P'_{i,h}$	0.7432

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

$\Delta P_{C,t}$	0.0216
$\Delta P_{C,s}$	0.0087
$\Delta P_{F,e}$	-0.0009
$\Delta P_{g,F}$	-0.0009
$\Delta P_{i,g}$	0.0035

Chemical Properties

CR	1
FR	0
SR	1
AR	2.3
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.3
T_g [°C]	557
$T_{10^{13}}$ [°C]	557
$T_{10^{7.6}}$ [°C]	719
c_p [J/(g*K)]	0.858
λ [W/(m•K)]	1.114
AT [°C]	609
ρ [g/cm^3]	2.51
E [10^3 N/mm^2]	82
µ	0.206
K [10^{-6} mm^2/N]	2.76
$HK_{0.1/20}$	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	2.4	2.9	3.3	0.3	0.8	1.2
+20/+40	2.4	3.0	3.5	1.1	1.6	2.1
+60/+80	2.5	3.1	3.7	1.5	2.1	2.7

Datasheet

SCHOTT
glass made of ideas

N-BK7HT
517642.251

n_d = 1.51680	ν_d = 64.17	$n_F - n_C$ = 0.008054
n_e = 1.51872	ν_e = 63.96	$n_{F'} - n_{C'}$ = 0.008110

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.48921
$n_{1970.1}$	1970.1	1.49495
$n_{1529.6}$	1529.6	1.50091
$n_{1060.0}$	1060.0	1.50669
n_t	1014.0	1.50731
n_s	852.1	1.50980
n_r	706.5	1.51289
n_C	656.3	1.51432
$n_{C'}$	643.8	1.51472
$n_{632.8}$	632.8	1.51509
n_D	589.3	1.51673
n_d	587.6	1.51680
n_e	546.1	1.51872
n_F	486.1	1.52238
$n_{F'}$	480.0	1.52283
n_g	435.8	1.52668
n_h	404.7	1.53024
n_i	365.0	1.53627
$n_{334.1}$	334.1	1.54272
$n_{312.6}$	312.6	1.54862
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.039612120
B_2	0.231792344
B_3	1.010469450
C_1	0.006000699
C_2	0.0200179144
C_3	103.56065300

Constants of Formula for dn/dT

D_0	1.86E-06
D_1	1.31E-08
D_2	-1.37E-11
E_0	4.34E-07
E_1	6.27E-10
λ_{TK} [µm]	0.170

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.750	0.490
2325	0.850	0.660
1970	0.954	0.890
1530	0.995	0.987
1060	0.999	0.999
700	0.999	0.998
660	0.999	0.997
620	0.999	0.997
580	0.999	0.998
546	0.999	0.998
500	0.999	0.997
460	0.998	0.996
436	0.998	0.996
420	0.998	0.996
405	0.998	0.996
400	0.998	0.996
390	0.998	0.994
380	0.997	0.992
370	0.996	0.989
365	0.994	0.985
350	0.985	0.964
334	0.950	0.880
320	0.820	0.600
310	0.570	0.240
300	0.220	0.020
290	0.040	
280	0.000	
270		
260		
250		

Color Code

λ80 / λ5	33/29

Remarks

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.3098
$P_{C,s}$	0.5612
$P_{d,C}$	0.3076
$P_{e,d}$	0.2386
$P_{g,F}$	0.5349
$P_{i,h}$	0.7483

Relative Partial Dispersion P'

$P'_{s,t}$	0.3076
$P'_{C',s}$	0.6062
$P'_{d,C'}$	0.2566
$P'_{e,d}$	0.2370
$P'_{g,F'}$	0.4754
$P'_{i,h}$	0.7432

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

$\Delta P_{C,t}$	0.0216
$\Delta P_{C,s}$	0.0087
$\Delta P_{F,e}$	-0.0009
$\Delta P_{g,F}$	-0.0009
$\Delta P_{i,g}$	0.0035

Chemical Properties

CR	1
FR	0
SR	1
AR	2.3
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.3
T_g [°C]	557
$T_{10^{13}}$ [°C]	557
$T_{10^{7.6}}$ [°C]	719
c_p [J/(g*K)]	0.858
λ [W/(m•K)]	1.114
ρ [g/cm³]	2.51
E [10^3 N/mm²]	82
µ	0.206
K [10^{-6} mm²/N]	2.77
$HK_{0.1/20}$	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	2.4	2.9	3.3	0.3	0.8	1.2
+20/+40	2.4	3.0	3.5	1.1	1.6	2.1
+60/+80	2.5	3.1	3.7	1.5	2.1	2.7

Datasheet

SCHOTT
glass made of ideas

N-BK7HTi
517642.251

n_d = 1.51680	ν_d = 64.17	$n_F - n_C$ = 0.008054
n_e = 1.51872	ν_e = 63.96	$n_{F'} - n_{C'}$ = 0.008110

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.48921
$n_{1970.1}$	1970.1	1.49495
$n_{1529.6}$	1529.6	1.50091
$n_{1060.0}$	1060.0	1.50669
n_t	1014.0	1.50731
n_s	852.1	1.50980
n_r	706.5	1.51289
n_C	656.3	1.51432
$n_{C'}$	643.8	1.51472
$n_{632.8}$	632.8	1.51509
n_D	589.3	1.51673
n_d	587.6	1.51680
n_e	546.1	1.51872
n_F	486.1	1.52238
$n_{F'}$	480.0	1.52283
n_g	435.8	1.52668
n_h	404.7	1.53024
n_i	365.0	1.53627
$n_{334.1}$	334.1	1.54272
$n_{312.6}$	312.6	1.54862
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.039612120
B_2	0.231792344
B_3	1.010469450
C_1	0.006000699
C_2	0.0200179144
C_3	103.56065300

Constants of Formula for dn/dT

D_0	1.86E-06
D_1	1.31E-08
D_2	-1.37E-11
E_0	4.34E-07
E_1	6.27E-10
λ_{TK} [µm]	0.170

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.75	0.49
2325	0.85	0.66
1970	0.954	0.89
1530	0.995	0.987
1060	0.999	0.999
700	0.999	0.998
660	0.999	0.997
620	0.999	0.997
580	0.999	0.998
546	0.999	0.998
500	0.999	0.997
460	0.998	0.996
436	0.998	0.996
420	0.998	0.996
405	0.998	0.996
400	0.998	0.996
390	0.998	0.994
380	0.997	0.992
370	0.996	0.989
365	0.994	0.985
350	0.985	0.964
334	0.95	0.88
320	0.82	0.60
310	0.57	0.24
300	0.22	0.02
290	0.04	
280	0.00	
270		
260		
250		

Color Code

λ80 / λ5	33/29

Remarks

i-line glass

Relative Partial Dispersion P

$P_{s,t}$	0.3098
$P_{C,s}$	0.5612
$P_{d,C}$	0.3076
$P_{e,d}$	0.2386
$P_{g,F}$	0.5349
$P_{i,h}$	0.7483

Relative Partial Dispersion P'

$P'_{s,t}$	0.3076
$P'_{C',s}$	0.6062
$P'_{d,C'}$	0.2566
$P'_{e,d}$	0.2370
$P'_{g,F'}$	0.4754
$P'_{i,h}$	0.7432

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

$\Delta P_{C,t}$	0.0216
$\Delta P_{C,s}$	0.0087
$\Delta P_{F,e}$	-0.0009
$\Delta P_{g,F}$	-0.0009
$\Delta P_{i,g}$	0.0035

Chemical Properties

CR	1
FR	0
SR	1
AR	2.3
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.3
T_g [°C]	557
$T_{10^{13}}$ [°C]	557
$T_{10^{7.6}}$ [°C]	719
c_p [J/(g*K)]	0.858
λ [W/(m•K)]	1.114
ρ [g/cm³]	2.51
E [10^3 N/mm²]	82
µ	0.206
K [10^{-6} mm²/N]	2.76
$HK_{0.1/20}$	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	2.4	2.9	3.3	0.3	0.8	1.2
+20/+40	2.4	3.0	3.5	1.1	1.6	2.1
+60/+80	2.5	3.1	3.7	1.5	2.1	2.7

Datasheet

SCHOTT
glass made of ideas

N-BK10
498670.239

n_d = 1.49782	ν_d = 66.95	$n_F - n_C$ = 0.007435
n_e = 1.49960	ν_e = 66.78	$n_{F'} - n_{C'}$ = 0.007481

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.47060
$n_{1970.1}$	1970.1	1.47647
$n_{1529.6}$	1529.6	1.48252
$n_{1060.0}$	1060.0	1.48827
n_t	1014.0	1.48887
n_s	852.1	1.49127
n_r	706.5	1.49419
n_C	656.3	1.49552
$n_{C'}$	643.8	1.49589
$n_{632.8}$	632.8	1.49623
n_D	589.3	1.49775
n_d	587.6	1.49782
n_e	546.1	1.49960
n_F	486.1	1.50296
$n_{F'}$	480.0	1.50337
n_g	435.8	1.50690
n_h	404.7	1.51014
n_i	365.0	1.51561
$n_{334.1}$	334.1	1.52144
$n_{312.6}$	312.6	1.52674
$n_{296.7}$	296.7	1.53151
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	0.888308131
B_2	0.328964475
B_3	0.984610769
C_1	0.005169008
C_2	0.0161190045
C_3	99.75753310

Constants of Formula for dn/dT

D_0	3.32E-06
D_1	1.72E-08
D_2	-2.05E-11
E_0	3.57E-07
E_1	3.90E-10
λ_{TK} [µm]	0.169

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.740	0.470
2325	0.870	0.710
1970	0.980	0.950
1530	0.992	0.980
1060	0.998	0.996
700	0.998	0.995
660	0.997	0.993
620	0.997	0.992
580	0.997	0.993
546	0.997	0.993
500	0.996	0.991
460	0.996	0.990
436	0.996	0.989
420	0.996	0.989
405	0.996	0.990
400	0.996	0.990
390	0.996	0.989
380	0.994	0.985
370	0.994	0.986
365	0.994	0.986
350	0.991	0.978
334	0.978	0.950
320	0.940	0.860
310	0.870	0.710
300	0.710	0.420
290	0.410	0.110
280	0.120	
270	0.010	
260		
250		

Color Code

λ80 / λ5	31/27

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.3224
$P_{C,s}$	0.5716
$P_{d,C}$	0.3093
$P_{e,d}$	0.2387
$P_{g,F}$	0.5303
$P_{i,h}$	0.7360

Relative Partial Dispersion P'

$P'_{s,t}$	0.3204
$P'_{C',s}$	0.6174
$P'_{d,C'}$	0.2580
$P'_{e,d}$	0.2373
$P'_{g,F'}$	0.4716
$P'_{i,h}$	0.7315

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

$\Delta P_{C,t}$	0.0314
$\Delta P_{C,s}$	0.0126
$\Delta P_{F,e}$	-0.0012
$\Delta P_{g,F}$	-0.0008
$\Delta P_{i,g}$	0.0091

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.6
T_g [°C]	551
$T_{10^{13}}$ [°C]	
$T_{10^{7.6}}$ [°C]	753
c_p [J/(g*K)]	0.810
λ [W/(m•K)]	1.320
ρ [g/cm^3]	2.39
E [10^3 N/mm^2]	71
µ	0.203
K [10^{-6} mm^2/N]	3.21
$HK_{0.1/20}$	560
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	2.7	3.1	3.5	0.7	1.1	1.4
+20/+40	2.9	3.4	3.8	1.6	2.1	2.5
+60/+80	3.1	3.7	4.1	2.1	2.6	3.1

Datasheet

SCHOTT
glass made of ideas

P-BK7
516641.243

n_d = 1.51640	ν_d = 64.06	$n_F - n_C$ = 0.008061
n_e = 1.51832	ν_e = 63.87	$n_{F'} - n_{C'}$ = 0.008115

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.48811
$n_{1970.1}$	1970.1	1.49407
$n_{1529.6}$	1529.6	1.50025
$n_{1060.0}$	1060.0	1.50620
n_t	1014.0	1.50683
n_s	852.1	1.50936
n_r	706.5	1.51248
n_C	656.3	1.51392
$n_{C'}$	643.8	1.51431
$n_{632.8}$	632.8	1.51469
n_D	589.3	1.51633
n_d	587.6	1.51640
n_e	546.1	1.51832
n_F	486.1	1.52198
$n_{F'}$	480.0	1.52243
n_g	435.8	1.52628
n_h	404.7	1.52982
n_i	365.0	1.53583
$n_{334.1}$	334.1	1.54227
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.183185030
B_2	0.087175643
B_3	1.031337010
C_1	0.007221420
C_2	0.0268216805
C_3	101.70236200

Constants of Formula for dn/dT

D_0	5.96E-06
D_1	1.36E-08
D_2	1.04E-12
E_0	5.00E-07
E_1	6.97E-10
λ_{TK} [µm]	0.125

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.730	0.460
2325	0.870	0.700
1970	0.967	0.920
1530	0.992	0.979
1060	0.999	0.999
700	0.999	0.997
660	0.999	0.997
620	0.999	0.997
580	0.999	0.997
546	0.999	0.997
500	0.998	0.996
460	0.998	0.995
436	0.998	0.994
420	0.997	0.994
405	0.997	0.993
400	0.997	0.992
390	0.996	0.990
380	0.994	0.986
370	0.992	0.979
365	0.989	0.973
350	0.971	0.930
334	0.880	0.730
320	0.570	0.240
310	0.180	0.020
300	0.000	
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	33/30

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.3143
$P_{C,s}$	0.5649
$P_{d,C}$	0.3082
$P_{e,d}$	0.2387
$P_{g,F}$	0.5335
$P_{i,h}$	0.7455

Relative Partial Dispersion P'

$P'_{s,t}$	0.3122
$P'_{C',s}$	0.6102
$P'_{d,C'}$	0.2571
$P'_{e,d}$	0.2371
$P'_{g,F'}$	0.4742
$P'_{i,h}$	0.7405

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

$\Delta P_{C,t}$	0.0303
$\Delta P_{C,s}$	0.0126
$\Delta P_{F,e}$	-0.0016
$\Delta P_{g,F}$	-0.0025
$\Delta P_{i,g}$	-0.0017

Chemical Properties

CR	1
FR	0
SR	1
AR	2.3
PR	2.3
SR-J	1
WR-J	4

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.3
T_g [°C]	498
$T_{10^{13}}$ [°C]	498
$T_{10^{7.6}}$ [°C]	657
c_p [J/(g*K)]	0.870
λ [W/(m•K)]	1.130
AT [°C]	546
ρ [g/cm^3]	2.43
E [10^3 N/mm^2]	85
µ	0.202
K [10^{-6} mm^2/N]	2.77
$HK_{0.1/20}$	627
Abrasion Aa	66

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	4.1	4.7	5.2	2.1	2.6	3.1
+20/+40	4.1	4.8	5.3	2.8	3.5	4.0
+60/+80	4.3	5.1	5.7	3.3	4.0	4.6

Datasheet

SCHOTT
glass made of ideas

K7
511604.253

n_d = 1.51112	ν_d = 60.41	$n_F - n_C$ = 0.008461
n_e = 1.51314	ν_e = 60.15	$n_{F'} - n_{C'}$ = 0.008531

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.48553
$n_{1970.1}$	1970.1	1.49046
$n_{1529.6}$	1529.6	1.49565
$n_{1060.0}$	1060.0	1.50091
n_t	1014.0	1.50150
n_s	852.1	1.50394
n_r	706.5	1.50707
n_C	656.3	1.50854
$n_{C'}$	643.8	1.50895
$n_{632.8}$	632.8	1.50934
n_D	589.3	1.51105
n_d	587.6	1.51112
n_e	546.1	1.51314
n_F	486.1	1.51700
$n_{F'}$	480.0	1.51748
n_g	435.8	1.52159
n_h	404.7	1.52540
n_i	365.0	1.53189
$n_{334.1}$	334.1	1.53891
$n_{312.6}$	312.6	1.54537
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.127355500
B_2	0.124412303
B_3	0.827100531
C_1	0.007203417
C_2	0.0269835916
C_3	100.38458800

Constants of Formula for dn/dT

D_0	-1.67E-06
D_1	8.80E-09
D_2	-2.86E-11
E_0	5.42E-07
E_1	7.81E-10
λ_{TK} [µm]	0.172

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.650	0.340
2325	0.760	0.500
1970	0.910	0.790
1530	0.992	0.980
1060	0.998	0.994
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.994
546	0.998	0.994
500	0.997	0.993
460	0.996	0.990
436	0.996	0.990
420	0.996	0.990
405	0.996	0.990
400	0.996	0.990
390	0.995	0.988
380	0.993	0.983
370	0.990	0.976
365	0.988	0.971
350	0.976	0.940
334	0.910	0.780
320	0.710	0.420
310	0.400	0.100
300	0.090	
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	33/30

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2880
$P_{C,s}$	0.5436
$P_{d,C}$	0.3049
$P_{e,d}$	0.2385
$P_{g,F}$	0.5422
$P_{i,h}$	0.7677

Relative Partial Dispersion P'

$P'_{s,t}$	0.2857
$P'_{C',s}$	0.5874
$P'_{d,C'}$	0.2542
$P'_{e,d}$	0.2365
$P'_{g,F'}$	0.4814
$P'_{i,h}$	0.7614

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

$\Delta P_{C,t}$	0.0001
$\Delta P_{C,s}$	-0.0001
$\Delta P_{F,e}$	0.0000
$\Delta P_{g,F}$	0.0000
$\Delta P_{i,g}$	-0.0001

Chemical Properties

CR	3
FR	0
SR	2
AR	1
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.7
T_g [°C]	513
$T_{10^{13}}$ [°C]	
$T_{10^{7.6}}$ [°C]	712
c_p [J/(g*K)]	
λ [W/(m•K)]	
ρ [g/cm³]	2.53
E [10^3 N/mm²]	69
µ	0.214
K [10^{-6} mm²/N]	2.95
$HK_{0.1/20}$	520
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	1.0	1.6	2.1	-1.0	-0.4	0.1
+20/+40	0.9	1.6	2.2	-0.4	0.2	0.9
+60/+80	0.8	1.6	2.3	-0.2	0.6	1.2

Datasheet

SCHOTT
glass made of ideas

K10
501564.252

n_d = 1.50137	ν_d = 56.41	$n_F - n_C$ = 0.008888
n_e = 1.50349	ν_e = 56.15	$n_{F'} - n_{C'}$ = 0.008967

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.47507
$n_{1970.1}$	1970.1	1.48008
$n_{1529.6}$	1529.6	1.48536
$n_{1060.0}$	1060.0	1.49076
n_t	1014.0	1.49137
n_s	852.1	1.49389
n_r	706.5	1.49713
n_C	656.3	1.49867
$n_{C'}$	643.8	1.49910
$n_{632.8}$	632.8	1.49950
n_D	589.3	1.50129
n_d	587.6	1.50137
n_e	546.1	1.50349
n_F	486.1	1.50756
$n_{F'}$	480.0	1.50807
n_g	435.8	1.51243
n_h	404.7	1.51649
n_i	365.0	1.52350
$n_{334.1}$	334.1	1.53120
$n_{312.6}$	312.6	1.53844
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.156870820
B_2	0.064262544
B_3	0.872376139
C_1	0.008094243
C_2	0.0386051284
C_3	104.74773000

Constants of Formula for dn/dT

D_0	4.86E-06
D_1	1.72E-08
D_2	-3.02E-11
E_0	3.82E-07
E_1	4.53E-10
λ_{TK} [µm]	0.260

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.770	0.520
2325	0.830	0.630
1970	0.940	0.850
1530	0.993	0.983
1060	0.998	0.996
700	0.999	0.997
660	0.998	0.994
620	0.997	0.993
580	0.997	0.993
546	0.997	0.992
500	0.996	0.991
460	0.996	0.990
436	0.995	0.988
420	0.995	0.988
405	0.995	0.987
400	0.994	0.986
390	0.993	0.982
380	0.989	0.973
370	0.986	0.966
365	0.983	0.958
350	0.963	0.910
334	0.880	0.720
320	0.630	0.310
310	0.370	0.130
300	0.140	0.020
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	33/30

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2835
$P_{C,s}$	0.5385
$P_{d,C}$	0.3037
$P_{e,d}$	0.2382
$P_{g,F}$	0.5475
$P_{i,h}$	0.7888

Relative Partial Dispersion P'

$P'_{s,t}$	0.2810
$P'_{C',s}$	0.5817
$P'_{d,C'}$	0.2531
$P'_{e,d}$	0.2362
$P'_{g,F'}$	0.4860
$P'_{i,h}$	0.7819

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

$\Delta P_{C,t}$	0.0094
$\Delta P_{C,s}$	0.0041
$\Delta P_{F,e}$	-0.0007
$\Delta P_{g,F}$	-0.0015
$\Delta P_{i,g}$	-0.0048

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1.2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.4
T_g [°C]	459
$T_{10^{13}}$ [°C]	453
$T_{10^{7.6}}$ [°C]	691
c_p [J/(g*K)]	0.770
λ [W/(m•K)]	1.120
ρ [g/cm³]	2.52
E [10^3 N/mm²]	65
µ	0.190
K [10^{-6} mm²/N]	3.12
$HK_{0.1/20}$	470
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	3.3	3.9	4.5	1.3	1.8	2.4
+20/+40	3.6	4.2	4.9	2.3	2.9	3.6
+60/+80	3.8	4.5	5.2	2.8	3.4	4.2

Datasheet

SCHOTT
glass made of ideas

N-K5
522595.259

n_d = 1.52249	ν_d = 59.48	$n_F - n_C$ = 0.008784
n_e = 1.52458	ν_e = 59.22	$n_{F'} - n_{C'}$ = 0.008858

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.49656
$n_{1970.1}$	1970.1	1.50146
$n_{1529.6}$	1529.6	1.50664
$n_{1060.0}$	1060.0	1.51197
n_t	1014.0	1.51257
n_s	852.1	1.51507
n_r	706.5	1.51829
n_C	656.3	1.51982
$n_{C'}$	643.8	1.52024
$n_{632.8}$	632.8	1.52064
n_D	589.3	1.52241
n_d	587.6	1.52249
n_e	546.1	1.52458
n_F	486.1	1.52860
$n_{F'}$	480.0	1.52910
n_g	435.8	1.53338
n_h	404.7	1.53734
n_i	365.0	1.54412
$n_{334.1}$	334.1	1.55145
$n_{312.6}$	312.6	1.55821
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.085118330
B_2	0.199562005
B_3	0.930511663
C_1	0.006610995
C_2	0.0241108660
C_3	111.98277700

Constants of Formula for dn/dT

D_0	-4.13E-07
D_1	1.03E-08
D_2	-3.40E-11
E_0	4.73E-07
E_1	5.19E-10
λ_{TK} [µm]	0.213

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.780	0.530
2325	0.850	0.660
1970	0.950	0.870
1530	0.994	0.986
1060	0.998	0.995
700	0.998	0.994
660	0.997	0.992
620	0.997	0.993
580	0.998	0.995
546	0.998	0.995
500	0.997	0.993
460	0.996	0.991
436	0.996	0.991
420	0.996	0.991
405	0.996	0.989
400	0.995	0.988
390	0.994	0.984
380	0.991	0.977
370	0.985	0.962
365	0.982	0.956
350	0.950	0.880
334	0.830	0.630
320	0.540	0.210
310	0.220	0.020
300	0.060	
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	34/30

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2843
$P_{C,s}$	0.5404
$P_{d,C}$	0.3044
$P_{e,d}$	0.2384
$P_{g,F}$	0.5438
$P_{i,h}$	0.7717

Relative Partial Dispersion P'

$P'_{s,t}$	0.2819
$P'_{C',s}$	0.5839
$P'_{d,C'}$	0.2538
$P'_{e,d}$	0.2364
$P'_{g,F'}$	0.4828
$P'_{i,h}$	0.7653

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

$\Delta P_{C,t}$	-0.0025
$\Delta P_{C,s}$	-0.0012
$\Delta P_{F,e}$	0.0001
$\Delta P_{g,F}$	0.0000
$\Delta P_{i,g}$	-0.0019

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.6
T_g [°C]	546
$T_{10^{13}}$ [°C]	540
$T_{10^{7.6}}$ [°C]	720
c_p [J/(g*K)]	0.783
λ [W/(m•K)]	0.950
ρ [g/cm³]	2.59
E [10^3 N/mm²]	71
µ	0.224
K [10^{-6} mm²/N]	3.03
$HK_{0.1/20}$	530
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	1.5	2.1	2.6	-0.6	0.0	0.5
+20/+40	1.4	2.1	2.7	0.1	0.7	1.4
+60/+80	1.4	2.1	2.8	0.4	1.1	1.8

Datasheet

SCHOTT
glass made of ideas

N-ZK7
508612.249

n_d = 1.50847	ν_d = 61.19	$n_F - n_C$ = 0.008310
n_e = 1.51045	ν_e = 60.98	$n_{F'} - n_{C'}$ = 0.008370

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.48062
$n_{1970.1}$	1970.1	1.48637
$n_{1529.6}$	1529.6	1.49233
$n_{1060.0}$	1060.0	1.49813
n_t	1014.0	1.49876
n_s	852.1	1.50129
n_r	706.5	1.50445
n_C	656.3	1.50592
$n_{C'}$	643.8	1.50633
$n_{632.8}$	632.8	1.50671
n_D	589.3	1.50840
n_d	587.6	1.50847
n_e	546.1	1.51045
n_F	486.1	1.51423
$n_{F'}$	480.0	1.51470
n_g	435.8	1.51869
n_h	404.7	1.52238
n_i	365.0	1.52865
$n_{334.1}$	334.1	1.53538
$n_{312.6}$	312.6	1.54155
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.077150320
B_2	0.168079109
B_3	0.851889892
C_1	0.006766017
C_2	0.0230642817
C_3	89.04987780

Constants of Formula for dn/dT

D_0	1.15E-05
D_1	1.73E-08
D_2	-8.06E-11
E_0	4.32E-07
E_1	7.05E-10
λ_{TK} [µm]	0.179

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.660	0.350
2325	0.850	0.660
1970	0.971	0.930
1530	0.990	0.976
1060	0.998	0.994
700	0.998	0.996
660	0.998	0.994
620	0.998	0.994
580	0.998	0.995
546	0.998	0.995
500	0.997	0.993
460	0.995	0.988
436	0.994	0.984
420	0.992	0.981
405	0.991	0.977
400	0.990	0.975
390	0.987	0.969
380	0.982	0.956
370	0.976	0.940
365	0.971	0.930
350	0.940	0.860
334	0.850	0.670
320	0.690	0.390
310	0.490	0.170
300	0.220	0.030
290	0.030	
280		
270		
260		
250		

Color Code

λ80 / λ5	34/29

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.3049
$P_{C,s}$	0.5570
$P_{d,C}$	0.3069
$P_{e,d}$	0.2386
$P_{g,F}$	0.5370
$P_{i,h}$	0.7543

Relative Partial Dispersion P'

$P'_{s,t}$	0.3027
$P'_{C',s}$	0.6017
$P'_{d,C'}$	0.2560
$P'_{e,d}$	0.2369
$P'_{g,F'}$	0.4771
$P'_{i,h}$	0.7488

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

$\Delta P_{C,t}$	0.0267
$\Delta P_{C,s}$	0.0115
$\Delta P_{F,e}$	-0.0017
$\Delta P_{g,F}$	-0.0039
$\Delta P_{i,g}$	-0.0129

Chemical Properties

CR	1
FR	0
SR	2
AR	1.2
PR	2.2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	4.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	5.2
T_g [°C]	539
$T_{10^{13}}$ [°C]	
$T_{10^{7.6}}$ [°C]	721
c_p [J/(g*K)]	0.770
λ [W/(m•K)]	1.042
ρ [g/cm^3]	2.49
E [10^3 N/mm^2]	70
µ	0.214
K [10^{-6} mm^2/N]	3.63
$HK_{0.1/20}$	530
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	5.9	6.5	7.0	3.9	4.5	4.9
+20/+40	6.4	7.0	7.6	5.1	5.7	6.3
+60/+80	6.4	7.2	7.8	5.4	6.2	6.8

Datasheet

SCHOTT
glass made of ideas

N-ZK7A
508610.247

n_d = 1.50805	ν_d = 61.04	$n_F - n_C$ = 0.008323
n_e = 1.51004	ν_e = 60.84	$n_{F'} - n_{C'}$ = 0.008384

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.48001
$n_{1970.1}$	1970.1	1.48582
$n_{1529.6}$	1529.6	1.49184
$n_{1060.0}$	1060.0	1.49768
n_t	1014.0	1.49831
n_s	852.1	1.50086
n_r	706.5	1.50403
n_C	656.3	1.50550
$n_{C'}$	643.8	1.50591
$n_{632.8}$	632.8	1.50629
n_D	589.3	1.50798
n_d	587.6	1.50805
n_e	546.1	1.51004
n_F	486.1	1.51382
$n_{F'}$	480.0	1.51429
n_g	435.8	1.51829
n_h	404.7	1.52198
n_i	365.0	1.52826
$n_{334.1}$	334.1	1.53500
$n_{312.6}$	312.6	1.54118
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.075098910
B_2	0.168895044
B_3	0.860503983
C_1	0.006766017
C_2	0.0230642817
C_3	89.04987780

Constants of Formula for dn/dT

D_0	1.09E-05
D_1	1.98E-08
D_2	-1.49E-11
E_0	4.48E-07
E_1	3.26E-10
λ_{TK} [µm]	0.183

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.660	0.350
2325	0.850	0.660
1970	0.971	0.930
1530	0.990	0.976
1060	0.998	0.994
700	0.998	0.996
660	0.998	0.994
620	0.998	0.994
580	0.998	0.995
546	0.998	0.995
500	0.997	0.993
460	0.995	0.988
436	0.994	0.984
420	0.992	0.981
405	0.991	0.977
400	0.990	0.975
390	0.987	0.969
380	0.982	0.956
370	0.976	0.940
365	0.971	0.930
350	0.940	0.860
334	0.850	0.670
320	0.690	0.390
310	0.490	0.170
300	0.220	0.030
290	0.030	
280		
270		
260		
250		

Color Code

λ80 / λ5	34/29

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.3058
$P_{C,s}$	0.5576
$P_{d,C}$	0.3070
$P_{e,d}$	0.2386
$P_{g,F}$	0.5368
$P_{i,h}$	0.7540

Relative Partial Dispersion P'

$P'_{s,t}$	0.3036
$P'_{C',s}$	0.6024
$P'_{d,C'}$	0.2560
$P'_{e,d}$	0.2369
$P'_{g,F'}$	0.4770
$P'_{i,h}$	0.7486

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

$\Delta P_{C,t}$	0.0289
$\Delta P_{C,s}$	0.0125
$\Delta P_{F,e}$	-0.0019
$\Delta P_{g,F}$	-0.0043
$\Delta P_{i,g}$	-0.0146

Chemical Properties

CR	1
FR	0
SR	2
AR	1.2
PR	2.2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	4.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	5.2
T_g [°C]	519
$T_{10^{13}}$ [°C]	547
$T_{10^{7.6}}$ [°C]	729
c_p [J/(g*K)]	0.770
λ [W/(m•K)]	1.042
ρ [g/cm^3]	2.47
E [10^3 N/mm^2]	70
µ	0.214
K [10^{-6} mm^2/N]	3.63
$HK_{0.1/20}$	530

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	5.8	6.5	7.0	3.8	4.4	4.9
+20/+40	6.1	6.8	7.4	4.9	5.5	6.1
+60/+80	6.5	7.2	7.9	5.5	6.2	6.8

Datasheet

SCHOTT
glass made of ideas

N-BAK1
573576.319

n_d = 1.57250	ν_d = 57.55	$n_F - n_C$ = 0.009948
n_e = 1.57487	ν_e = 57.27	$n_{F'} - n_{C'}$ = 0.010039

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.54556
$n_{1970.1}$	1970.1	1.55032
$n_{1529.6}$	1529.6	1.55543
$n_{1060.0}$	1060.0	1.56088
n_t	1014.0	1.56152
n_s	852.1	1.56421
n_r	706.5	1.56778
n_C	656.3	1.56949
$n_{C'}$	643.8	1.56997
$n_{632.8}$	632.8	1.57041
n_D	589.3	1.57241
n_d	587.6	1.57250
n_e	546.1	1.57487
n_F	486.1	1.57943
$n_{F'}$	480.0	1.58000
n_g	435.8	1.58488
n_h	404.7	1.58941
n_i	365.0	1.59716
$n_{334.1}$	334.1	1.60554
$n_{312.6}$	312.6	1.61326
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.123656620
B_2	0.309276848
B_3	0.881511957
C_1	0.006447428
C_2	0.0222284402
C_3	107.29775100

Constants of Formula for dn/dT

D_0	1.86E-07
D_1	1.29E-08
D_2	-1.87E-11
E_0	5.25E-07
E_1	5.46E-10
λ_{TK} [µm]	0.182

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.810	0.580
2325	0.880	0.720
1970	0.960	0.900
1530	0.994	0.986
1060	0.998	0.996
700	0.999	0.997
660	0.998	0.995
620	0.998	0.995
580	0.998	0.995
546	0.998	0.995
500	0.997	0.992
460	0.996	0.990
436	0.996	0.989
420	0.996	0.990
405	0.996	0.990
400	0.996	0.990
390	0.995	0.988
380	0.993	0.983
370	0.991	0.977
365	0.987	0.969
350	0.971	0.930
334	0.920	0.820
320	0.800	0.570
310	0.610	0.290
300	0.350	0.070
290	0.100	
280	0.010	
270		
260		
250		

Color Code

λ80 / λ5	33/29

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2712
$P_{C,s}$	0.5301
$P_{d,C}$	0.3029
$P_{e,d}$	0.2384
$P_{g,F}$	0.5472
$P_{i,h}$	0.7788

Relative Partial Dispersion P'

$P'_{s,t}$	0.2687
$P'_{C',s}$	0.5730
$P'_{d,C'}$	0.2525
$P'_{e,d}$	0.2362
$P'_{g,F'}$	0.4855
$P'_{i,h}$	0.7717

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

$\Delta P_{C,t}$	-0.0167
$\Delta P_{C,s}$	-0.0069
$\Delta P_{F,e}$	0.0006
$\Delta P_{g,F}$	0.0002
$\Delta P_{i,g}$	-0.0075

Chemical Properties

CR	2
FR	1
SR	3.3
AR	1.2
PR	2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.6
T_g [°C]	592
$T_{10^{13}}$ [°C]	592
$T_{10^{7.6}}$ [°C]	746
c_p [J/(g*K)]	0.687
λ [W/(m•K)]	0.795
ρ [g/cm³]	3.19
E [10^3 N/mm²]	73
µ	0.252
K [10^{-6} mm²/N]	2.62
$HK_{0.1/20}$	530
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	1.7	2.4	3.0	-0.4	0.2	0.8
+20/+40	1.8	2.5	3.2	0.4	1.2	1.8
+60/+80	1.9	2.7	3.5	0.9	1.7	2.4

Datasheet

SCHOTT
glass made of ideas

N-BAK2
540597.286

n_d = 1.53996	ν_d = 59.71	$n_F - n_C$ = 0.009043
n_e = 1.54212	ν_e = 59.44	$n_{F'} - n_{C'}$ = 0.009120

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.51387
$n_{1970.1}$	1970.1	1.51871
$n_{1529.6}$	1529.6	1.52385
$n_{1060.0}$	1060.0	1.52919
n_t	1014.0	1.52980
n_s	852.1	1.53234
n_r	706.5	1.53564
n_C	656.3	1.53721
$n_{C'}$	643.8	1.53765
$n_{632.8}$	632.8	1.53806
n_D	589.3	1.53988
n_d	587.6	1.53996
n_e	546.1	1.54212
n_F	486.1	1.54625
$n_{F'}$	480.0	1.54677
n_g	435.8	1.55117
n_h	404.7	1.55525
n_i	365.0	1.56221
$n_{334.1}$	334.1	1.56971
$n_{312.6}$	312.6	1.57660
$n_{296.7}$	296.7	1.58287
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.016621540
B_2	0.319903051
B_3	0.937232995
C_1	0.005923838
C_2	0.0203828415
C_3	113.11841700

Constants of Formula for dn/dT

D_0	-1.45E-06
D_1	1.10E-08
D_2	4.89E-12
E_0	5.16E-07
E_1	3.05E-10
λ_{TK} [µm]	0.164

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.760	0.500
2325	0.830	0.630
1970	0.940	0.850
1530	0.994	0.984
1060	0.999	0.997
700	0.998	0.996
660	0.998	0.995
620	0.998	0.994
580	0.998	0.995
546	0.998	0.995
500	0.998	0.994
460	0.997	0.992
436	0.997	0.992
420	0.997	0.993
405	0.997	0.993
400	0.997	0.993
390	0.997	0.992
380	0.996	0.990
370	0.996	0.989
365	0.994	0.986
350	0.988	0.971
334	0.963	0.910
320	0.870	0.700
310	0.690	0.400
300	0.400	0.100
290	0.160	
280	0.040	
270		
260		
250		

Color Code

λ80 / λ5	32/28

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2810
$P_{C,s}$	0.5382
$P_{d,C}$	0.3042
$P_{e,d}$	0.2385
$P_{g,F}$	0.5437
$P_{i,h}$	0.7695

Relative Partial Dispersion P'

$P'_{s,t}$	0.2787
$P'_{C',s}$	0.5817
$P'_{d,C'}$	0.2536
$P'_{e,d}$	0.2364
$P'_{g,F'}$	0.4826
$P'_{i,h}$	0.7630

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

$\Delta P_{C,t}$	-0.0089
$\Delta P_{C,s}$	-0.0039
$\Delta P_{F,e}$	0.0004
$\Delta P_{g,F}$	0.0004
$\Delta P_{i,g}$	-0.0027

Chemical Properties

CR	2
FR	0
SR	1
AR	1
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.0
T_g [°C]	554
$T_{10^{13}}$ [°C]	550
$T_{10^{7.6}}$ [°C]	727
c_p [J/(g*K)]	0.690
λ [W/(m•K)]	0.920
ρ [g/cm³]	2.86
E [10^3 N/mm²]	71
µ	0.233
K [10^{-6} mm²/N]	2.60
$HK_{0.1/20}$	530
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	1.1	1.8	2.3	-0.9	-0.3	0.2
+20/+40	1.0	1.7	2.3	-0.3	0.3	0.9
+60/+80	1.1	1.8	2.4	0.1	0.8	1.4

Datasheet

SCHOTT
glass made of ideas

N-BAK4
569560.305

n_d = 1.56883	ν_d = 55.98	$n_F - n_C$ = 0.010162
n_e = 1.57125	ν_e = 55.70	$n_{F'} - n_{C'}$ = 0.010255

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.54044
$n_{1970.1}$	1970.1	1.54561
$n_{1529.6}$	1529.6	1.55111
$n_{1060.0}$	1060.0	1.55688
n_t	1014.0	1.55755
n_s	852.1	1.56034
n_r	706.5	1.56400
n_C	656.3	1.56575
$n_{C'}$	643.8	1.56624
$n_{632.8}$	632.8	1.56670
n_D	589.3	1.56874
n_d	587.6	1.56883
n_e	546.1	1.57125
n_F	486.1	1.57591
$n_{F'}$	480.0	1.57649
n_g	435.8	1.58149
n_h	404.7	1.58614
n_i	365.0	1.59415
$n_{334.1}$	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	1.288346420
B_2	0.132817724
B_3	0.945395373
C_1	0.007799806
C_2	0.0315631177
C_3	105.96587500

Constants of Formula for dn/dT

D_0	3.06E-06
D_1	1.44E-08
D_2	-2.23E-11
E_0	5.46E-07
E_1	6.05E-10
λ_{TK} [µm]	0.189

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.780	0.540
2325	0.870	0.710
1970	0.959	0.900
1530	0.993	0.982
1060	0.998	0.995
700	0.999	0.997
660	0.998	0.995
620	0.998	0.995
580	0.998	0.996
546	0.998	0.996
500	0.998	0.994
460	0.996	0.989
436	0.995	0.988
420	0.995	0.987
405	0.993	0.983
400	0.992	0.980
390	0.987	0.967
380	0.976	0.940
370	0.954	0.890
365	0.930	0.840
350	0.790	0.550
334	0.350	0.070
320	0.010	
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	36/33

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2749
$P_{C,s}$	0.5321
$P_{d,C}$	0.3029
$P_{e,d}$	0.2383
$P_{g,F}$	0.5487
$P_{i,h}$	0.7879

Relative Partial Dispersion P'

$P'_{s,t}$	0.2724
$P'_{C',s}$	0.5750
$P'_{d,C'}$	0.2524
$P'_{e,d}$	0.2361
$P'_{g,F'}$	0.4869
$P'_{i,h}$	0.7807

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

$\Delta P_{C,t}$	-0.0034
$\Delta P_{C,s}$	-0.0013
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0010
$\Delta P_{i,g}$	-0.0087

Chemical Properties

CR	1
FR	0
SR	1.2
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.9
T_g [°C]	581
$T_{10^{13}}$ [°C]	569
$T_{10^{7.6}}$ [°C]	725
c_p [J/(g*K)]	0.680
λ [W/(m•K)]	0.880
ρ [g/cm³]	3.05
E [10^3 N/mm²]	77
µ	0.240
K [10^{-6} mm²/N]	2.90
$HK_{0.1/20}$	550
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	3.0	3.7	4.4	0.9	1.5	2.2
+20/+40	3.1	3.9	4.7	1.8	2.6	3.3
+60/+80	3.3	4.2	5.0	2.2	3.1	3.9

Datasheet

SCHOTT
glass made of ideas

N-BAK4HT
569560.305

n_d = 1.56883	ν_d = 55.98	$n_F - n_C$ = 0.010162
n_e = 1.57125	ν_e = 55.70	$n_{F'} - n_{C'}$ = 0.010255

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.54044
$n_{1970.1}$	1970.1	1.54561
$n_{1529.6}$	1529.6	1.55111
$n_{1060.0}$	1060.0	1.55688
n_t	1014.0	1.55755
n_s	852.1	1.56034
n_r	706.5	1.56400
n_C	656.3	1.56575
$n_{C'}$	643.8	1.56624
$n_{632.8}$	632.8	1.56670
n_D	589.3	1.56874
n_d	587.6	1.56883
n_e	546.1	1.57125
n_F	486.1	1.57591
$n_{F'}$	480.0	1.57649
n_g	435.8	1.58149
n_h	404.7	1.58614
n_i	365.0	1.59415
$n_{334.1}$	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	1.288346420
B_2	0.132817724
B_3	0.945395373
C_1	0.007799806
C_2	0.0315631177
C_3	105.96587500

Constants of Formula for dn/dT

D_0	3.06E-06
D_1	1.44E-08
D_2	-2.23E-11
E_0	5.46E-07
E_1	6.05E-10
λ_{TK} [µm]	0.189

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.850	0.670
2325	0.920	0.810
1970	0.979	0.950
1530	0.996	0.991
1060	0.999	0.998
700	0.998	0.996
660	0.998	0.996
620	0.998	0.996
580	0.998	0.996
546	0.998	0.996
500	0.998	0.995
460	0.997	0.993
436	0.997	0.992
420	0.996	0.991
405	0.994	0.985
400	0.993	0.983
390	0.989	0.972
380	0.979	0.950
370	0.959	0.900
365	0.940	0.860
350	0.810	0.600
334	0.390	0.100
320	0.020	0.000
310	0.000	
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	36/32

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2749
$P_{C,s}$	0.5321
$P_{d,C}$	0.3029
$P_{e,d}$	0.2383
$P_{g,F}$	0.5487
$P_{i,h}$	0.7879

Relative Partial Dispersion P'

$P'_{s,t}$	0.2724
$P'_{C',s}$	0.5750
$P'_{d,C'}$	0.2524
$P'_{e,d}$	0.2361
$P'_{g,F'}$	0.4869
$P'_{i,h}$	0.7807

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

$\Delta P_{C,t}$	-0.0034
$\Delta P_{C,s}$	-0.0013
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0010
$\Delta P_{i,g}$	-0.0087

Chemical Properties

CR	1
FR	0
SR	1.2
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.9
T_g [°C]	581
$T_{10^{13}}$ [°C]	569
$T_{10^{7.6}}$ [°C]	725
c_p [J/(g*K)]	0.680
λ [W/(m•K)]	0.880
ρ [g/cm³]	3.05
E [10^3 N/mm²]	77
µ	0.240
K [10^{-6} mm²/N]	2.90
$HK_{0.1/20}$	550
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	3.0	3.7	4.4	0.9	1.5	2.2
+20/+40	3.1	3.9	4.7	1.8	2.6	3.3
+60/+80	3.3	4.2	5.0	2.2	3.1	3.9

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