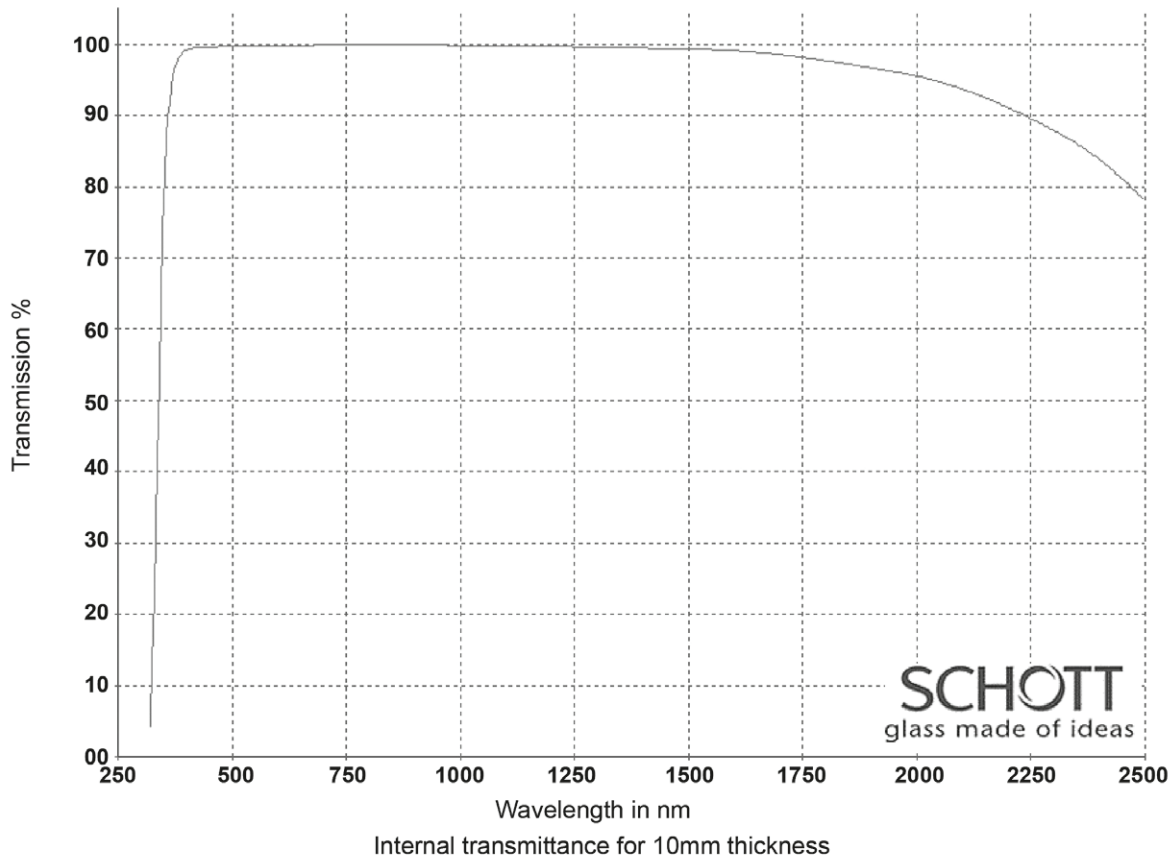


Optical Glasses - 250-2500nm

Material / Specification: Schott BaK4 for 250nm - 2500nm transmission

Range / Description: OPG-BaK4



WAVELENGTH	N-BAK4 (T%)
2500 nm	0.780
2325 nm	0.870
1970 nm	0.959
1530 nm	0.993
1060 nm	0.998
700 nm	0.999
660 nm	0.998
620 nm	0.998
580 nm	0.998
546 nm	0.998
500 nm	0.998
460 nm	0.996
436 nm	0.995
420 nm	0.995
405 nm	0.993
400 nm	0.992
390 nm	0.987
380 nm	0.976
370 nm	0.954
365 nm	0.930
350 nm	0.790
334 nm	0.350
320 nm	0.010
310 nm	0.000
300 nm	0.000
290 nm	0.000
280 nm	0.000
270 nm	0.000
260 nm	0.000
250 nm	0.000

Optical Glasses



Optical Glasses - 250-2500nm

Material / Specification: Schott BaK4 for 250nm - 2500nm transmission
Range / Description: OPG-BaK4

SCHOTT
glass made of ideas

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	$1.28834642 \cdot 10^{+00}$
B_2	$1.32817724 \cdot 10^{-01}$
B_3	$9.45395373 \cdot 10^{-01}$
C_1	$7.79980626 \cdot 10^{-03}$
C_2	$3.15631177 \cdot 10^{-02}$
C_3	$1.05965875 \cdot 10^{+02}$

Constants of Formula dn/dT	
D_0	$3.06 \cdot 10^{-06}$
D_1	$1.44 \cdot 10^{-08}$
D_2	$-2.23 \cdot 10^{-11}$
E_0	$5.46 \cdot 10^{-07}$
E_1	$6.05 \cdot 10^{-10}$
$\lambda_{TK}[\mu m]$	0.189

[°C]	$\Delta n_{rel}/\Delta T [10^{-6}/K]$			$\Delta n_{abs}/\Delta T [10^{-6}/K]$		
	1060.0	e	g	1060.0	e	g
-40/-20	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

Internal Transmittance τ_i		
λ [nm]	τ_i [10 mm]	τ_i [25 mm]
2500	0.78	0.54
2325	0.87	0.71
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	0.89
365	0.930	0.84
350	0.79	0.55
334	0.35	0.07
320	0.01	
310		
300		
290		
280		
270		
260		
250		

Color Code	
λ_{80}/λ_{5}	36/33
Remarks	

Relative Partial Dispersion	
$P_{s,t}$	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
$P'_{s,t}$	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 Dispersion ΔP from "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

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	7.0
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	7.9
$T_g [^\circ C]$	581
$T_{10}^{13.0} [^\circ C]$	569
$T_{10}^{7.6} [^\circ C]$	725
$c_p [J/(g \cdot K)]$	0.680
$\lambda [W/(m \cdot K)]$	0.880
$\rho [g/cm^3]$	3.05
$E [10^3 N/mm^2]$	77
μ	0.240
$K [10^{-6} mm^2/N]$	2.90
HK _{0.1/20}	550
HG	2
B	0
CR	1
FR	0
SR	1.2
AR	1
PR	1

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