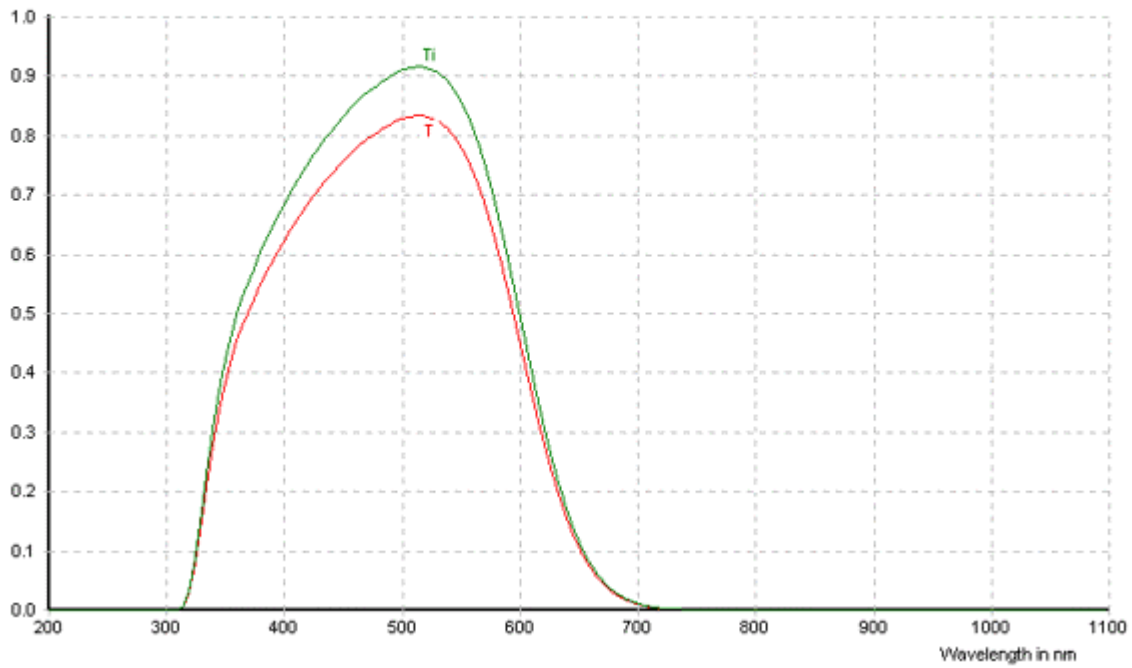


Thickness in mm : 1.0  
Wavelength in nm :  
Transmittance :  
Internal Transmittance :

**BG18**



<b>Reflection factor</b>	
$P_d$	0.91
<b>Bubble content</b>	
Bubble class	2
<b>Chemical resistance</b>	
FR class	0
SR class	2.0
AR class	2.0

<b>Density</b>	
$\rho$ [g/cm <sup>3</sup> ]	2.68
<b>Transformation temperature</b>	
T <sub>g</sub> [°C]	459
<b>Thermal expansion</b>	
$\alpha_{-30/+70^\circ\text{C}}$ [10 <sup>-6</sup> /K]	7.4
$\alpha_{-20/300^\circ\text{C}}$ [10 <sup>-6</sup> /K]	8.8
<b>Temperature coefficient</b>	
T <sub>k</sub> [nm/°C]	

Per DIN 58191 BP 480/250  
Per DIN 58191 KP 605

Ionically colored glass

<b>Limit values of <math>\tau_i</math></b> for thickness $d^1 = 1$ mm		
Wave-length [nm]	Limits	Value from catalog curve
350	$\geq 0.30$	0.42
405	$\geq 0.65$	0.70
514	$\geq 0.88$	0.92
633	$\leq 0.25$	0.22
694	$\leq 0.03$	0.02
1060	$\leq 5 \cdot 10^{-4}$	$2 \cdot 10^{-4}$

<b>Refractive index n</b>		
$\lambda$ [nm]	Element	n
404.7	Hg	1.55
587.6	He	1.54

<b>Tristimulus values</b>						
	d [mm]	x	y	Y	$\lambda_d$ [nm]	$P_e$
A	1	0.361	0.441	61	502	0.20
2856	2	0.309	0.460	46	501	0.31
K	3	0.275	0.472	37	501	0.39
	5	0.233	0.490	26	502	0.49
	1	0.340	0.426	62	500	0.20
3200	2	0.292	0.441	48	500	0.32
K	3	0.260	0.452	38	500	0.39
	5	0.222	0.469	27	500	0.48
	1	0.255	0.335	68	493	0.21
D <sub>65</sub>	2	0.225	0.341	54	493	0.31
	3	0.206	0.347	45	494	0.38
	5	0.183	0.362	33	495	0.45

**Application notes**  
Band pass filter  
- see section 6.7.3  
  
Short pass filter  
- see section 6.7.2

Status June 1997

**Transmittance  $\tau$  and internal transmittance  $\tau_i$  at  $d = 1$  mm**

$\lambda$ [nm]	$\tau$	$\tau_i$	$\lambda$ [nm]	$\tau$	$\tau_i$
200	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	700	0.01	0.01
210	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	710	0.006	0.007
220	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	720	0.004	0.004
230	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	730	0.002	0.002
240	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	740	$9 \cdot 10^{-4}$	0.001
250	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	750	$7 \cdot 10^{-4}$	$8 \cdot 10^{-4}$
260	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	760	$5 \cdot 10^{-4}$	$5 \cdot 10^{-4}$
270	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	770	$3 \cdot 10^{-4}$	$3 \cdot 10^{-4}$
280	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	780	$2 \cdot 10^{-4}$	$2 \cdot 10^{-4}$
290	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	790	$9 \cdot 10^{-5}$	$1 \cdot 10^{-4}$
300	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	800	$7 \cdot 10^{-5}$	$8 \cdot 10^{-5}$
310	$5 \cdot 10^{-4}$	$5 \cdot 10^{-4}$	850	$2 \cdot 10^{-5}$	$2 \cdot 10^{-5}$
320	0.03	0.03	900	$1 \cdot 10^{-5}$	$1 \cdot 10^{-5}$
330	0.14	0.16	950	$2 \cdot 10^{-5}$	$2 \cdot 10^{-5}$
340	0.28	0.31	1000	$5 \cdot 10^{-5}$	$6 \cdot 10^{-5}$
350	0.38	0.42	1060	$2 \cdot 10^{-4}$	$2 \cdot 10^{-4}$
360	0.45	0.50	1100	$5 \cdot 10^{-4}$	$5 \cdot 10^{-4}$
370	0.50	0.55	1200	0.003	0.003
380	0.55	0.60	1300	0.02	0.02
390	0.59	0.64	1400	0.05	0.06
400	0.62	0.68	1500	0.14	0.15
410	0.65	0.72	1600	0.25	0.28
420	0.68	0.75	1700	0.40	0.44
430	0.71	0.78	1800	0.51	0.56
440	0.73	0.81	1900	0.60	0.66
450	0.76	0.83	2000	0.68	0.75
460	0.78	0.85	2100	0.70	0.77
470	0.79	0.87	2200	0.71	0.78
480	0.81	0.89	2300	0.70	0.77
490	0.82	0.90	2400	0.72	0.79
500	0.83	0.91	2500	0.69	0.76
510	0.83	0.92	2600	0.62	0.68
520	0.83	0.92	2700	0.54	0.59
530	0.83	0.91	2800	0.06	0.07
540	0.81	0.89	2900	0.004	0.004
550	0.79	0.86	3000	$9 \cdot 10^{-4}$	0.001
560	0.75	0.82	3200	$4 \cdot 10^{-4}$	$4 \cdot 10^{-4}$
570	0.69	0.76	3400	$3 \cdot 10^{-4}$	$3 \cdot 10^{-4}$
580	0.62	0.69	3600	$6 \cdot 10^{-4}$	$6 \cdot 10^{-4}$
590	0.55	0.60	3800	$9 \cdot 10^{-4}$	0.001
600	0.46	0.51	4000	$4 \cdot 10^{-4}$	$4 \cdot 10^{-4}$
610	0.37	0.41	4200	$9 \cdot 10^{-5}$	$1 \cdot 10^{-4}$
620	0.29	0.32	4400	$2 \cdot 10^{-4}$	$2 \cdot 10^{-4}$
630	0.22	0.24	4600	$4 \cdot 10^{-4}$	$4 \cdot 10^{-4}$
640	0.16	0.18	4800	$4 \cdot 10^{-4}$	$4 \cdot 10^{-4}$
650	0.11	0.12	5000	$5 \cdot 10^{-4}$	$5 \cdot 10^{-4}$
660	0.07	0.08	5200	$9 \cdot 10^{-5}$	$1 \cdot 10^{-4}$
670	0.05	0.05			
680	0.03	0.03			
690	0.02	0.02			

WHILE EVERY ATTEMPT HAS BEEN MADE TO VERIFY THE SOURCE OF THE INFORMATION, NO RESPONSIBILITY IS ACCEPTED FOR ACCURACY OF DATA.

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