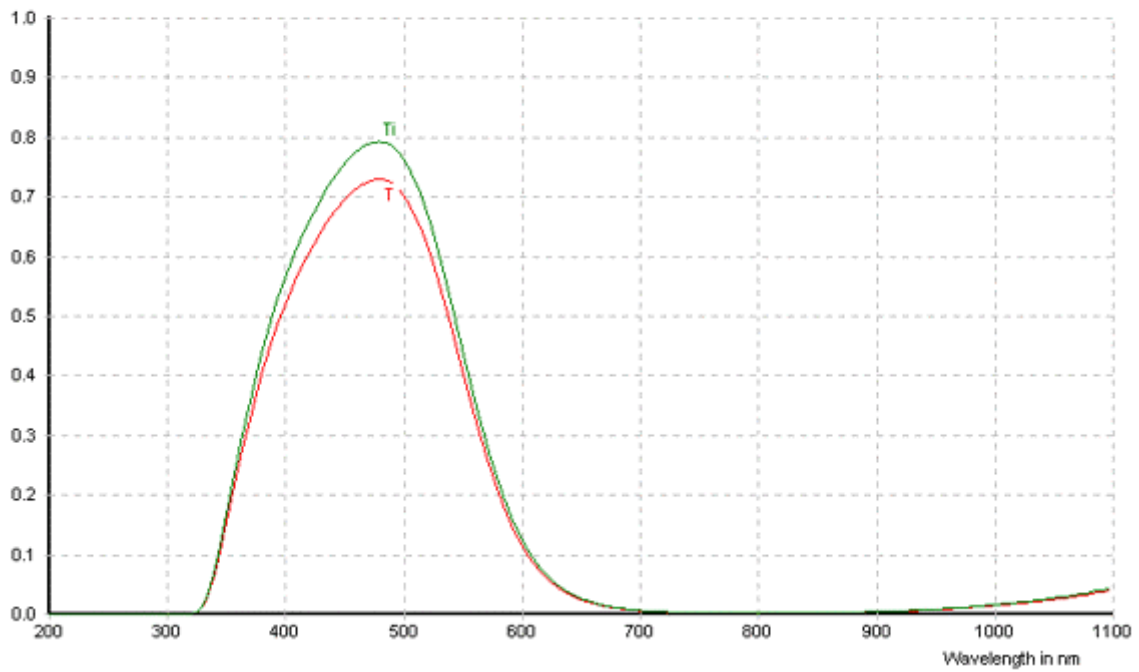


Thickness in mm : 1.0  
Wavelength in nm :  
Transmittance :  
Internal Transmittance :

**BG7**



<b>Reflection factor</b>	
$P_d$	0.92
<b>Bubble content</b>	
Bubble class	1
<b>Chemical resistance</b>	
FR class	0
SR class	1.0
AR class	1.0

<b>Density</b>	
$\rho$ [g/cm <sup>3</sup> ]	2.61
<b>Transformation temperature</b>	
T <sub>g</sub> [°C]	468
<b>Thermal expansion</b>	
$\alpha_{30/+70^\circ\text{C}}$ [10 <sup>-6</sup> /K]	8.5
$\alpha_{20/300^\circ\text{C}}$ [10 <sup>-6</sup> /K]	9.9
<b>Temperature coefficient</b>	
T <sub>k</sub> [nm/°C]	

Per DIN 58191 BP 466/182  
Per DIN 58191

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
365	$\geq 0.25$	0.30
488	$\geq 0.78$	0.79
633	$\leq 0.08$	0.05

<b>Refractive index n</b>		
$\lambda$ [nm]	Element	n
404.7	Hg	1.54
587.6	He	1.52

<b>Tristimulus values</b>						
	d	x	y	Y	$\lambda_d$	$P_e$
	[mm]				[nm]	
A	1	0.263	0.406	30	495	0.44
2856	2	0.180	0.361	15	492	0.65
K	3	0.145	0.318	8	490	0.75
	5	0.121	0.259	3	487	0.84
	1	0.246	0.382	32	493	0.45
3200	2	0.172	0.334	16	490	0.66
K	3	0.143	0.292	9	488	0.76
	5	0.122	0.239	4	485	0.84
D <sub>65</sub>	1	0.191	0.272	38	486	0.49
	2	0.152	0.229	21	484	0.67
	3	0.138	0.200	13	482	0.76
	5	0.127	0.168	6	480	0.83

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

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	0.006	0.007
210	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	710	0.005	0.006
220	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	720	0.005	0.005
230	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	730	0.004	0.004
240	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	740	0.004	0.004
250	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	750	0.003	0.003
260	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	760	0.003	0.003
270	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	770	0.003	0.003
280	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	780	0.003	0.003
290	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	790	0.003	0.003
300	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	800	0.003	0.003
310	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$	850	0.003	0.003
320	$5 \cdot 10^{-4}$	$5 \cdot 10^{-4}$	900	0.005	0.005
330	0.01	0.01	950	0.008	0.009
340	0.06	0.07	1000	0.01	0.02
350	0.15	0.16	1060	0.03	0.03
360	0.24	0.26	1100	0.04	0.04
370	0.32	0.35	1200	0.09	0.10
380	0.40	0.44	1300	0.16	0.17
390	0.46	0.50	1400	0.24	0.26
400	0.52	0.56	1500	0.33	0.36
410	0.56	0.61	1600	0.43	0.46
420	0.60	0.66	1700	0.51	0.55
430	0.64	0.70	1800	0.57	0.62
440	0.67	0.73	1900	0.63	0.68
450	0.69	0.75	2000	0.68	0.74
460	0.71	0.78	2100	0.71	0.77
470	0.72	0.79	2200	0.74	0.80
480	0.73	0.79	2300	0.75	0.82
490	0.72	0.79	2400	0.78	0.85
500	0.71	0.77	2500	0.80	0.87
510	0.67	0.73	2600	0.82	0.89
520	0.62	0.68	2700	0.81	0.88
530	0.56	0.61	2800	0.63	0.69
540	0.49	0.54	2900	0.63	0.68
550	0.41	0.45	3000	0.60	0.65
560	0.34	0.37	3200	0.51	0.55
570	0.27	0.30	3400	0.41	0.45
580	0.21	0.23	3600	0.40	0.43
590	0.16	0.17	3800	0.42	0.46
600	0.12	0.13	4000	0.46	0.50
610	0.09	0.10	4200	0.40	0.43
620	0.06	0.07	4400	0.27	0.29
630	0.05	0.05	4600	0.08	0.09
640	0.03	0.04	4800	0.03	0.03
650	0.02	0.03	5000	0.009	0.01
660	0.02	0.02	5200	$5 \cdot 10^{-4}$	$5 \cdot 10^{-4}$
670	0.01	0.02			
680	0.01	0.01			
690	0.008	0.009			

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

UQG LTD, THE NORMAN INDUSTRIAL ESTATE, 99-101 CAMBRIDGE ROAD, MILTON, CAMBRIDGE, CB4 6AT, ENGLAND. TEL: +44 (0) 1223 420329 FAX: +44 (0) 1223 420506