

$n_e$ 1.607015	$v_e$ 37.68	$n_{F'} - n_{C'}$ 0.016111
$n_d$ 1.603239	$v_d$ 37.94	$n_F - n_C$ 0.015900

Class of bubbles	Viscosity temperature				
	$\eta$ [Poise]	$10^{14.5}$	$10^{13}$	$10^{10}$	$10^8$
4	$t$ [°C]	420	460	545	635

Relative partial dispersion deviations from the 'Normal Line'				
	$i - F'$	$g - F'$	$F' - e$	$F' - r$
$\Delta P$	-0.007	-0.0014	-0.0008	-0.0002
$\Delta v_e$	-0.7	-0.9	-1.4	+0.3
	$i - F$	$g - F$	$F - e$	$F - r$
$\Delta P$	-0.007	-0.0015	-0.0008	-0.0002
$\Delta v_d$	-0.7	-0.9	-1.4	+0.5

Stress optical coefficient $B$ [ $\text{nm}\cdot\text{cm}^{-1} / \text{kp}\cdot\text{cm}^{-2}$ ], $\lambda=550\text{nm}$	Thermal conductivity			
	-50°C	0°C	+20°C	+50°C
2.93	0.58	0.64	0.66	0.68

Young's modulus $E$ [ $\text{kp}\cdot\text{mm}^{-2}$ ]	Shear modulus $G$ [ $\text{kp}\cdot\text{mm}^{-2}$ ]	Coefficient of linear thermal expansion $\alpha_{20/t}$ $10^7$ [°C]	Chemical resistance		
			Stain resistance		
5820	2427		Group	I	
Poisson's ratio $\mu$	Density $\rho$ [ $\text{g}\cdot\text{cm}^{-3}$ ]	+20 ÷ -60°C	+20 ÷ +120°C	Weather resistance	
0.199	3.48	70	74	Group	A

Optical density increment on irradiation		
Initial density $D_0$ [ $\text{cm}^{-1}$ ]	Radiation dose [R]	Optical density increment $\Delta D$ [ $\text{cm}^{-1}$ ]
0.050	$1 \cdot 10^4$	0.100
	$1 \cdot 10^5$	0.47

Refractive indices		
$\lambda$ [nm]	n	
312.6	-	-
334.1	-	-
365.0	i	1.64601
404.66	h	1.63164
435.83	g	1.623668
479.99	F'	1.615402
486.13	F	1.614456
546.07	e	1.607015
587.56	d	1.603239
589.29	D	1.603100
643.85	C'	1.599292
656.27	C	1.598556
706.52	r	1.59597
768.2	-	1.59342
852.1	-	1.59074
1013.9	-	1.58701
1128.6	-	1.58501
1395.1	-	1.58127
1529.6	-	1.57957
1813.1	-	1.57603
1970.1	-	1.57399
2249.3	-	1.57008
2325.4	-	1.56894

Dispersion coefficients	
$v_h = \frac{n_h - 1}{n_i - n_g}$	28.3
$v_e = \frac{n_e - 1}{n_{F'} - n_{C'}}$	37.68
$v_d = \frac{n_d - 1}{n_F - n_C}$	37.94
$v_D = \frac{n_D - 1}{n_F - n_C}$	37.93
$v_{1529.6} = \frac{n_{1529.6} - 1}{n_{1013.9} - n_{2249.3}}$	34.2

Relative partial dispersions		
$\Delta n$	$\frac{\Delta n}{n_{F'} - n_{C'}}$	$\frac{\Delta n}{n_F - n_C}$
312.6 - 334.1	-	-
334.1 - i	-	-
i - h	0.892	0.904
h - g	0.4948	0.5013
g - F	0.5718	0.5794
g - F'	0.5131	0.5199
F - e	0.4619	0.4680
F - D	0.7049	0.7142
F' - e	0.5206	0.5275
d - D	0.0086	0.0087
D - C	0.2820	0.2858
e - C'	0.4794	0.4858
e - C	0.5251	0.5380
C' - r	0.206	0.209
C - r	0.161	0.163
r - 852.1	0.325	0.329
852.1 - 1013.9	0.231	0.234
1013.9 - 1128.6	0.124	0.126
1128.6 - 1395.1	0.232	0.236
1395.1 - 1529.6	0.105	0.107
1529.6 - 1813.1	0.220	0.223
1813.1 - 1970.1	0.127	0.128
1970.1 - 2249.3	0.243	0.246
2249.3 - 2325.4	0.071	0.072

Internal transmittance		
$\lambda$ [nm]	$\tau_i$ (s=10mm)	$\tau_i$ (s=25mm)
280	-	-
300	-	-
320	-	-
340	-	-
360	-	-
380	-	-
400	0.979	0.948
420	0.984	0.960
440	0.985	0.963
460	0.989	0.972
480	0.991	0.978
500	0.993	0.983
520	0.994	0.985
540	0.995	0.987
560	0.995	0.987
580	0.995	0.987
600	0.995	0.987
620	0.994	0.985
640	0.993	0.983
660	0.993	0.983
680	0.995	0.987
700	0.995	0.987
750	0.997	0.993
800	0.998	0.995
900	0.998	0.995
1000	0.997	0.993
1050	0.998	0.995
1100	0.997	0.993
1200	0.998	0.995
1300	0.997	0.993
1400	0.992	0.980
1500	0.994	0.985

Refractive indices at laser wavelengths	
$\lambda$ [nm]	n
350.7	-
356.4	-
488.0	1.61417
514.0	1.61063
520.8	1.60980
530.0	1.60873
568.2	1.60489
632.8	1.59998
647.1	1.59910
694.3	1.59655
890.0	1.58973
1060.0	1.58616

Radiation resistant analogue glass type-

**F106**