

$n_e$ 1.813767	$v_e$ 25.17	$n_{F'} - n_{C'}$ 0.032325
$n_d$ 1.806274	$v_d$ 25.37	$n_F - n_C$ 0.031780

Class of bubbles	Viscosity temperature				
	$\eta$ [Poise]	$10^{14.5}$	$10^{13}$	$10^{10}$	$10^8$
5	$t$ [°C]	375	415	470	520

Relative partial dispersion deviations from the 'Normal Line'				
	$i - F'$	$g - F'$	$F' - e$	$F' - r$
$\Delta P$	+0.076	+0.0065	+0.0014	-0.0009
$\Delta v_e$	+8.2	+4.4	+2.4	+1.2
	$i - F$	$g - F$	$F - e$	$F - r$
$\Delta P$	+0.079	+0.0075	+0.0013	-0.0007
$\Delta v_d$	+7.9	+4.2	+2.2	+1.2

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
0.70	0.48	0.52	0.54	0.55

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	Group	
5530	2221			III	
Poisson's ratio $\mu$	Density $\rho$ [ $\text{g}\cdot\text{cm}^{-3}$ ]	+20 ÷ -60°C	+20 ÷ +120°C	Weather resistance	
		75	81	Group	A
0.245	5.19				

Optical density increment on irradiation		
Initial density $D_0$ [ $\text{cm}^{-1}$ ]	Radiation dose [R]	Optical density increment $\Delta D$ [ $\text{cm}^{-1}$ ]
0.075	$1 \cdot 10^4$	0.100
	$1 \cdot 10^5$	0.49

Refractive indices		
$\lambda$ [nm]	n	
312.6	-	-
334.1	-	-
365.0	i	1.89876
404.66	h	1.86571
435.83	g	1.848338
479.99	F'	1.830897
486.13	F	1.828936
546.07	e	1.813767
587.56	d	1.806274
589.29	D	1.806000
643.85	C'	1.798572
656.27	C	1.797156
706.52	r	1.79222
768.2	-	1.78749
852.1	-	1.78263
1013.9	-	1.77626
1128.6	-	1.77310
1395.1	-	1.76780
1529.6	-	1.76566
1813.1	-	1.76159
1970.1	-	1.75941
2249.3	-	1.75540
2325.4	-	1.75425

Dispersion coefficients	
$v_h = \frac{n_h - 1}{n_i - n_g}$	17.2
$v_e = \frac{n_e - 1}{n_{F'} - n_{C'}}$	25.17
$v_d = \frac{n_d - 1}{n_F - n_C}$	25.37
$v_D = \frac{n_D - 1}{n_F - n_C}$	25.36
$v_{1529.6} = \frac{n_{1529.6} - 1}{n_{1013.9} - n_{2249.3}}$	36.7

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	1.022	1.040
h - g	0.5374	0.5467
g - F	0.6002	0.6105
g - F'	0.5395	0.5488
F - e	0.4693	0.4773
F - D	0.7095	0.7217
F' - e	0.5299	0.5390
d - D	0.0085	0.0086
D - C	0.2736	0.2783
e - C'	0.4701	0.4781
e - C	0.5139	0.5227
C' - r	0.196	0.200
C - r	0.153	0.155
r - 852.1	0.297	0.302
852.1 - 1013.9	0.197	0.200
1013.9 - 1128.6	0.098	0.099
1128.6 - 1395.1	0.164	0.167
1395.1 - 1529.6	0.066	0.067
1529.6 - 1813.1	0.126	0.128
1813.1 - 1970.1	0.068	0.069
1970.1 - 2249.3	0.124	0.126
2249.3 - 2325.4	0.035	0.036

Internal transmittance		
$\lambda$ [nm]	$\tau_i$ (s=10mm)	$\tau_i$ (s=25mm)
280	-	-
300	-	-
320	-	-
340	-	-
360	-	-
380	0.240	0.028
400	0.610	0.291
420	0.848	0.663
440	0.931	0.836
460	0.967	0.919
480	0.984	0.960
500	0.991	0.978
520	0.994	0.985
540	0.996	0.990
560	0.997	0.993
580	0.997	0.993
600	0.996	0.990
620	0.995	0.987
640	0.995	0.987
660	0.995	0.987
680	0.996	0.990
700	0.997	0.993
750	0.998	0.995
800	0.997	0.993
900	0.997	0.993
1000	0.997	0.993
1050	0.997	0.993
1100	0.997	0.993
1200	0.997	0.993
1300	0.997	0.993
1400	0.993	0.983
1500	0.997	0.993

Refractive indices at laser wavelengths	
$\lambda$ [nm]	n
350.7	-
356.4	-
488.0	1.82836
514.0	1.82109
520.8	1.81940
530.0	1.81724
568.2	1.80953
632.8	1.79991
647.1	1.79819
694.3	1.79332
890.0	1.78085
1060.0	1.77490

Radiation resistant analogue glass type-

**TF110**