

$n_e$ 1.694729	$v_e$ 30.90	$n_{F'} - n_{C'}$ 0.022486
$n_d$ 1.689492	$v_d$ 31.13	$n_F - n_C$ 0.022150

Class of bubbles	Viscosity temperature				
	$\eta$ [Poise]	$10^{14.5}$	$10^{13}$	$10^{10}$	$10^8$
2	$t$ [°C]	375	410	495	560

Relative partial dispersion deviations from the 'Normal Line'				
	$i - F'$	$g - F'$	$F' - e$	$F' - r$
$\Delta P$	+0.016	+0.0012	+/-0	+0.0002
$\Delta v_e$	+1.7	+0.8	+/-0	-0.2
	$i - F$	$g - F$	$F - e$	$F - r$
$\Delta P$	+0.016	+0.0014	+/-0	+0.0002
$\Delta v_d$	+1.6	+0.8	+/-0	-0.3

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
2.05	0.52	0.55	0.57	0.58

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	
5730	2331			II	
Poisson's ratio $\mu$	Density $\rho$ [ $\text{g} \cdot \text{cm}^{-3}$ ]	+20 ÷ -60°C	+20 ÷ +120°C	Weather resistance	
		76	81	Group	A
0.229	4.23				

Optical density increment on irradiation		
Initial density $D_0$ [ $\text{cm}^{-1}$ ]	Radiation dose [R]	Optical density increment $\Delta D$ [ $\text{cm}^{-1}$ ]
0.060	$1 \cdot 10^4$	0.075
	$1 \cdot 10^5$	0.50

Refractive indices		
$\lambda$ [nm]	n	
312.6	-	-
334.1	-	-
365.0	i	1.75119
404.66	h	1.72992
435.83	g	1.718363
479.99	F'	1.706541
486.13	F	1.705199
546.07	e	1.694729
587.56	d	1.689492
589.29	D	1.689300
643.85	C'	1.684055
656.27	C	1.683049
706.52	r	1.67952
768.2	-	1.67610
852.1	-	1.67252
1013.9	-	1.66770
1128.6	-	1.66519
1395.1	-	1.66072
1529.6	-	1.65880
1813.1	-	1.65497
1970.1	-	1.65286
2249.3	-	1.64895
2325.4	-	1.64784

Dispersion coefficients	
$v_h = \frac{n_h - 1}{n_i - n_g}$	22.2
$v_e = \frac{n_e - 1}{n_{F'} - n_{C'}}$	30.90
$v_d = \frac{n_d - 1}{n_F - n_C}$	31.13
$v_D = \frac{n_D - 1}{n_F - n_C}$	31.12
$v_{1529.6} = \frac{n_{1529.6} - 1}{n_{1013.9} - n_{2249.3}}$	35.1

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	0.946	0.960
h - g	0.5140	0.5218
g - F	0.5854	0.5943
g - F'	0.5258	0.5337
F - e	0.4656	0.4727
F - D	0.7071	0.7178
F' - e	0.5253	0.5333
d - D	0.0085	0.0087
D - C	0.2780	0.2822
e - C'	0.4747	0.4819
e - C	0.5194	0.5273
C' - r	0.202	0.205
C - r	0.157	0.159
r - 852.1	0.311	0.316
852.1 - 1013.9	0.215	0.218
1013.9 - 1128.6	0.111	0.113
1128.6 - 1395.1	0.199	0.202
1395.1 - 1529.6	0.085	0.087
1529.6 - 1813.1	0.170	0.173
1813.1 - 1970.1	0.094	0.095
1970.1 - 2249.3	0.174	0.176
2249.3 - 2325.4	0.049	0.050

Internal transmittance		
$\lambda$ [nm]	$\tau_i$ (s=10mm)	$\tau_i$ (s=25mm)
280	-	-
300	-	-
320	-	-
340	-	-
360	-	-
380	0.841	0.649
400	0.917	0.805
420	0.959	0.901
440	0.973	0.934
460	0.982	0.956
480	0.988	0.971
500	0.988	0.971
520	0.994	0.985
540	0.996	0.990
560	0.996	0.990
580	0.995	0.987
600	0.994	0.985
620	0.993	0.983
640	0.992	0.980
660	0.992	0.980
680	0.994	0.985
700	0.994	0.985
750	0.996	0.990
800	0.996	0.990
900	0.996	0.990
1000	0.995	0.987
1050	0.995	0.987
1100	0.995	0.987
1200	0.995	0.987
1300	0.995	0.987
1400	0.993	0.983
1500	0.993	0.983

Refractive indices at laser wavelengths	
$\lambda$ [nm]	n
350.7	-
356.4	-
488.0	1.70480
514.0	1.69980
520.8	1.69864
530.0	1.69714
568.2	1.69178
632.8	1.68500
647.1	1.68379
694.3	1.68031
890.0	1.67120
1060.0	1.66663

Radiation resistant analogue glass type-

**TF108**