

$n_e$ 1.616878	$v_e$ 36.69	$n_{F'} - n_{C'}$ 0.016814
$n_d$ 1.612945	$v_d$ 36.95	$n_F - n_C$ 0.016590

Class of bubbles	Viscosity temperature				
	$\eta$ [Poise]	$10^{14.5}$	$10^{13}$	$10^{10}$	$10^8$
1	$t$ [°C]	405	475	565	640

Relative partial dispersion deviations from the 'Normal Line'				
	$i - F'$	$g - F'$	$F' - e$	$F' - r$
$\Delta P$	-0.002	-0.0006	-0.0005	+0.0003
$\Delta v_e$	-0.3	-0.4	-0.8	-0.4
	$i - F$	$g - F$	$F - e$	$F - r$
$\Delta P$	-0.003	-0.0007	-0.0005	+0.0002
$\Delta v_d$	-0.3	-0.4	-0.8	-0.4

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
2.95	0.62	0.68	0.71	0.73

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
5670	2322			I
Poisson's ratio $\mu$	Density $\rho$ [ $\text{g} \cdot \text{cm}^{-3}$ ]	+20 ÷ -60°C	+20 ÷ +120°C	Weather resistance
		71	74	
0.221	3.57			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
	$1 \cdot 10^5$	0.60

Refractive indices		
$\lambda$ [nm]	n	
312.6	-	-
334.1	-	-
365.0	i	1.65782
404.66	h	1.64269
435.83	g	1.634312
479.99	F'	1.625647
486.13	F	1.624657
546.07	e	1.616878
587.56	d	1.612945
589.29	D	1.612800
643.85	C'	1.608833
656.27	C	1.608067
706.52	r	1.60537
768.2	-	1.60273
852.1	-	1.59994
1013.9	-	1.59609
1128.6	-	1.59404
1395.1	-	1.59021
1529.6	-	1.58850
1813.1	-	1.58493
1970.1	-	1.58289
2249.3	-	1.57899
2325.4	-	1.57785

Dispersion coefficients	
$v_h = \frac{n_h - 1}{n_i - n_g}$	27.3
$v_e = \frac{n_e - 1}{n_{F'} - n_{C'}}$	36.69
$v_d = \frac{n_d - 1}{n_F - n_C}$	36.95
$v_D = \frac{n_D - 1}{n_F - n_C}$	36.94
$v_{1529.6} = \frac{n_{1529.6} - 1}{n_{1013.9} - n_{2249.3}}$	34.4

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	0.900	0.912
h - g	0.498	0.5050
g - F	0.5742	0.5820
g - F'	0.5153	0.5223
F - e	0.4626	0.4689
F - D	0.7052	0.7147
F' - e	0.5215	0.5286
d - D	0.0086	0.0087
D - C	0.2815	0.2853
e - C'	0.4785	0.4849
e - C	0.5240	0.5311
C' - r	0.206	0.209
C - r	0.160	0.163
r - 852.1	0.323	0.327
852.1 - 1013.9	0.229	0.232
1013.9 - 1128.6	0.122	0.124
1128.6 - 1395.1	0.227	0.230
1395.1 - 1529.6	0.102	0.104
1529.6 - 1813.1	0.212	0.215
1813.1 - 1970.1	0.122	0.123
1970.1 - 2249.3	0.232	0.235
2249.3 - 2325.4	0.068	0.068

Internal transmittance		
$\lambda$ [nm]	$\tau_i$ (s=10mm)	$\tau_i$ (s=25mm)
280	-	-
300	-	-
320	-	-
340	0.376	0.086
360	0.810	0.591
380	0.917	0.805
400	0.977	0.944
420	0.984	0.960
440	0.986	0.966
460	0.989	0.972
480	0.991	0.978
500	0.993	0.983
520	0.995	0.987
540	0.996	0.990
560	0.996	0.990
580	0.996	0.990
600	0.995	0.987
620	0.995	0.987
640	0.994	0.985
660	0.994	0.985
680	0.995	0.987
700	0.996	0.990
750	0.998	0.995
800	0.998	0.995
900	0.998	0.995
1000	0.998	0.995
1050	0.998	0.995
1100	0.998	0.995
1200	0.998	0.995
1300	0.997	0.993
1400	0.994	0.985
1500	0.996	0.990

Refractive indices at laser wavelengths	
$\lambda$ [nm]	n
350.7	-
356.4	-
488.0	1.62436
514.0	1.62066
520.8	1.61979
530.0	1.61868
568.2	1.61467
632.8	1.60955
647.1	1.60863
694.3	1.60597
890.0	1.59889
1060.0	1.59522

Radiation resistant analogue glass type-

**F101**