

n_e 1.723166	v_e 29.29	$n_{F'} - n_{C'}$ 0.024692
n_d 1.717412	v_d 29.51	$n_F - n_C$ 0.024310

Class of bubbles	Viscosity temperature				
	η [Poise]	$10^{14.5}$	10^{13}	10^{10}	10^8
2	t [°C]	395	430	500	555

Relative partial dispersion deviations from the 'Normal Line'				
	$i - F'$	$g - F'$	$F' - e$	$F' - r$
ΔP	+0.038	+0.0035	+0.0001	+0.0001
Δv_e	+4.1	+2.3	+0.2	-0.1
	$i - F$	$g - F$	$F - e$	$F - r$
ΔP	+0.040	+0.0039	+/-0	+0.0002
Δv_d	+4.0	+2.2	+/-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
2.20	-	-	-	-

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
5620	2301			III
Poisson's ratio μ	Density ρ [$\text{g} \cdot \text{cm}^{-3}$]	+20 ÷ -60°C	+20 ÷ +120°C	Weather resistance
		77	83	
0.221	4.46			A

Optical density increment on irradiation		
Initial density D_0 [cm^{-1}]	Radiation dose [R]	Optical density increment ΔD [cm^{-1}]
0.064	$1 \cdot 10^4$	0.130
	$1 \cdot 10^5$	0.70

Refractive indices		
λ [nm]	n	
312.6	-	-
334.1	-	-
365.0	i	1.78612
404.66	h	1.76214
435.83	g	1.749258
479.99	F'	1.736162
486.13	F	1.734681
546.07	e	1.723166
587.56	d	1.717412
589.29	D	1.717200
643.85	C'	1.711470
656.27	C	1.710371
706.52	r	1.70652
768.2	-	1.70280
852.1	-	1.69893
1013.9	-	1.69376
1128.6	-	1.69112
1395.1	-	1.68649
1529.6	-	1.68453
1813.1	-	1.68067
1970.1	-	1.67854
2249.3	-	1.67457
2325.4	-	1.67343

Dispersion coefficients	
$v_h = \frac{n_h - 1}{n_i - n_g}$	20.7
$v_e = \frac{n_e - 1}{n_{F'} - n_{C'}}$	29.29
$v_d = \frac{n_d - 1}{n_F - n_C}$	29.51
$v_D = \frac{n_D - 1}{n_F - n_C}$	29.50
$v_{1529.6} = \frac{n_{1529.6} - 1}{n_{1013.9} - n_{2249.3}}$	35.7

Relative partial dispersions		
Δn	$\frac{\Delta n}{n_{F'} - n_{C'}}$	$\frac{\Delta n}{n_F - n_C}$
312.6 - 334.1	-	-
334.1 - i	-	-
i - h	0.971	0.986
h - g	0.5217	0.5299
g - F	0.5904	0.5996
g - F'	0.5304	0.5387
F - e	0.4664	0.4737
F - D	0.7080	0.7191
F' - e	0.5263	0.5346
d - D	0.0086	0.0087
D - C	0.2766	0.2809
e - C'	0.4737	0.4811
e - C	0.5182	0.5263
C' - r	0.200	0.204
C - r	0.156	0.158
r - 852.1	0.307	0.312
852.1 - 1013.9	0.209	0.213
1013.9 - 1128.6	0.107	0.109
1128.6 - 1395.1	0.188	0.191
1395.1 - 1529.6	0.079	0.080
1529.6 - 1813.1	0.156	0.159
1813.1 - 1970.1	0.086	0.088
1970.1 - 2249.3	0.161	0.163
2249.3 - 2325.4	0.046	0.047

Internal transmittance		
λ [nm]	τ_i (s=10mm)	τ_i (s=25mm)
280	-	-
300	-	-
320	-	-
340	-	-
360	0.201	0.018
380	0.637	0.324
400	0.866	0.688
420	0.942	0.861
440	0.969	0.924
460	0.980	0.951
480	0.987	0.968
500	0.992	0.980
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	0.993	0.983
660	0.993	0.983
680	0.994	0.985
700	0.995	0.987
750	0.997	0.993
800	0.998	0.995
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	0.998	0.995
1400	0.996	0.990
1500	0.995	0.987

Refractive indices at laser wavelengths	
λ [nm]	n
350.7	-
356.4	-
488.0	1.73425
514.0	1.72874
520.8	1.72745
530.0	1.72581
568.2	1.71992
632.8	1.71250
647.1	1.71117
694.3	1.70738
890.0	1.69751
1060.0	1.69263

Radiation resistant analogue glass type-

TF103