

n_e 1.746231	v_e 27.94	$n_{F'} - n_{C'}$ 0.026705
n_d 1.740024	v_d 28.16	$n_F - n_C$ 0.026280

Class of bubbles	Viscosity temperature				
	η [Poise]	$10^{14.5}$	10^{13}	10^{10}	10^8
2	t [°C]	405	440	505	560

Relative partial dispersion deviations from the 'Normal Line'				
	$i - F'$	$g - F'$	$F' - e$	$F' - r$
ΔP	+0.042	+0.0038	+0.0006	-0.0007
Δv_e	+4.5	+2.6	+1.1	+1.0
	$i - F$	$g - F$	$F - e$	$F - r$
ΔP	+0.043	+0.0044	+0.0006	-0.0006
Δv_d	+4.3	+2.5	+1.0	+1.1

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
1.50	0.53	0.56	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	
5500	2218			III	
Poisson's ratio μ	Density ρ [$\text{g} \cdot \text{cm}^{-3}$]	+20 ÷ -60°C	+20 ÷ +120°C	Weather resistance	
		77	82	Group	A
0.240	4.65				

Optical density increment on irradiation		
Initial density D_0 [cm^{-1}]	Radiation dose [R]	Optical density increment ΔD [cm^{-1}]
0.066	$1 \cdot 10^4$	0.080
	$1 \cdot 10^5$	0.46

Refractive indices		
λ [nm]	n	
312.6	-	-
334.1	-	-
365.0	i	1.81477
404.66	h	1.78860
435.83	g	1.774548
479.99	F'	1.760321
486.13	F	1.758714
546.07	e	1.746231
587.56	d	1.740024
589.29	D	1.739800
643.85	C'	1.733616
656.27	C	1.732434
706.52	r	1.72831
768.2	-	1.72432
852.1	-	1.72019
1013.9	-	1.71470
1128.6	-	1.71191
1395.1	-	1.70708
1529.6	-	1.70506
1813.1	-	1.70113
1970.1	-	1.69899
2249.3	-	1.69507
2325.4	-	1.69396

Dispersion coefficients	
$v_h = \frac{n_h - 1}{n_i - n_g}$	19.6
$v_e = \frac{n_e - 1}{n_{F'} - n_{C'}}$	27.94
$v_d = \frac{n_d - 1}{n_F - n_C}$	28.16
$v_D = \frac{n_D - 1}{n_F - n_C}$	28.15
$v_{1529.6} = \frac{n_{1529.6} - 1}{n_{1013.9} - n_{2249.3}}$	35.9

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	0.980	0.996
h - g	0.5262	0.5347
g - F	0.5929	0.6025
g - F'	0.5327	0.5414
F - e	0.4674	0.4750
F - D	0.7082	0.7197
F' - e	0.5276	0.5362
d - D	0.0084	0.0085
D - C	0.2758	0.2803
e - C'	0.4724	0.4800
e - C	0.5166	0.5250
C' - r	0.199	0.202
C - r	0.154	0.157
r - 852.1	0.304	0.309
852.1 - 1013.9	0.206	0.209
1013.9 - 1128.6	0.104	0.106
1128.6 - 1395.1	0.181	0.184
1395.1 - 1529.6	0.076	0.077
1529.6 - 1813.1	0.147	0.149
1813.1 - 1970.1	0.080	0.081
1970.1 - 2249.3	0.147	0.149
2249.3 - 2325.4	0.042	0.042

Internal transmittance		
λ [nm]	τ_i (s=10mm)	τ_i (s=25mm)
280	-	-
300	-	-
320	-	-
340	-	-
360	0.090	-
380	0.507	0.183
400	0.822	0.613
420	0.921	0.814
440	0.962	0.902
460	0.979	0.948
480	0.988	0.971
500	0.991	0.978
520	0.994	0.985
540	0.996	0.990
560	0.996	0.990
580	0.996	0.990
600	0.995	0.987
620	0.994	0.985
640	0.993	0.983
660	0.994	0.985
680	0.994	0.985
700	0.995	0.987
750	0.997	0.993
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	0.998	0.995
1300	0.998	0.995
1400	0.996	0.990
1500	0.996	0.990

Refractive indices at laser wavelengths	
λ [nm]	n
350.7	-
356.4	-
488.0	1.75823
514.0	1.75226
520.8	1.75087
530.0	1.74909
568.2	1.74273
632.8	1.73473
647.1	1.73330
694.3	1.72923
890.0	1.71868
1060.0	1.71350

Radiation resistant analogue glass type-

TF104