

n_e 1.630513	v_e 59.10	$n_{F'} - n_{C'}$ 0.010669
n_d 1.627995	v_d 59.36	$n_F - n_C$ 0.010580

Class of bubbles	Viscosity temperature				
	η [Poise]	$10^{14.5}$	10^{13}	10^{10}	10^8
3	t [°C]	590	625	670	705

Relative partial dispersion deviations from the 'Normal Line'				
	$i - F'$	$g - F'$	$F' - e$	$F' - r$
ΔP	-0.014	-0.0003	+0.0007	-0.0022
Δv_e	-1.5	-0.2	+1.2	+3.0
	$i - F$	$g - F$	$F - e$	$F - r$
ΔP	-0.013	+0.0002	+0.0009	-0.0016
Δv_d	-1.3	+1.2	+1.5	+2.9

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
1.80	0.57	0.60	0.62	0.64

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
8590	3361			III
Poisson's ratio μ	Density ρ [$\text{g}\cdot\text{cm}^{-3}$]	+20 ÷ -60°C	+20 ÷ +120°C	Weather resistance
		69	76	
0.278	3.66			A

Optical density increment on irradiation		
Initial density D_0 [cm^{-1}]	Radiation dose [R]	Optical density increment ΔD [cm^{-1}]
0.050	$1 \cdot 10^4$	0.040
	$1 \cdot 10^5$	0.29

Refractive indices		
λ [nm]	n	
312.6	-	-
334.1	-	-
365.0	i	1.65401
404.66	h	1.64587
435.83	g	1.641100
479.99	F'	1.635953
486.13	F	1.635351
546.07	e	1.630513
587.56	d	1.627995
589.29	D	1.627900
643.85	C'	1.625284
656.27	C	1.624771
706.52	r	1.62294
768.2	-	1.62109
852.1	-	1.61907
1013.9	-	1.61609
1128.6	-	1.61437
1395.1	-	1.61082
1529.6	-	1.60907
1813.1	-	1.60523
1970.1	-	1.60292
2249.3	-	1.59840
2325.4	-	1.59707

Dispersion coefficients	
$v_h = \frac{n_h - 1}{n_i - n_g}$	49.6
$v_e = \frac{n_e - 1}{n_{F'} - n_{C'}}$	59.10
$v_d = \frac{n_d - 1}{n_F - n_C}$	59.36
$v_D = \frac{n_D - 1}{n_F - n_C}$	59.35
$v_{1529.6} = \frac{n_{1529.6} - 1}{n_{1013.9} - n_{2249.3}}$	34.4

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	0.763	0.769
h - g	0.4471	0.4508
g - F	0.5388	0.5433
g - F'	0.4824	0.4865
F - e	0.4534	0.4573
F - D	0.6983	0.7043
F' - e	0.5099	0.5142
d - D	0.0089	0.0090
D - C	0.2933	0.2957
e - C'	0.4901	0.4943
e - C	0.5382	0.5427
C' - r	0.220	0.222
C - r	0.172	0.173
r - 852.1	0.362	0.365
852.1 - 1013.9	0.279	0.282
1013.9 - 1128.6	0.162	0.163
1128.6 - 1395.1	0.333	0.336
1395.1 - 1529.6	0.163	0.165
1529.6 - 1813.1	0.360	0.363
1813.1 - 1970.1	0.216	0.218
1970.1 - 2249.3	0.424	0.427
2249.3 - 2325.4	0.125	0.126

Internal transmittance		
λ [nm]	τ_i (s=10mm)	τ_i (s=25mm)
280	-	-
300	-	-
320	-	-
340	-	-
360	-	-
380	0.932	0.838
400	0.966	0.917
420	0.982	0.956
440	0.986	0.966
460	0.989	0.972
480	0.992	0.980
500	0.994	0.985
520	0.996	0.990
540	0.997	0.993
560	0.997	0.993
580	0.996	0.990
600	0.995	0.987
620	0.994	0.985
640	0.994	0.985
660	0.994	0.985
680	0.995	0.987
700	0.995	0.987
750	0.996	0.990
800	0.995	0.987
900	0.994	0.985
1000	0.994	0.985
1050	0.994	0.985
1100	0.994	0.985
1200	0.994	0.985
1300	0.994	0.985
1400	0.993	0.983
1500	0.992	0.980

Refractive indices at laser wavelengths	
λ [nm]	n
350.7	-
356.4	-
488.0	1.63517
514.0	1.63289
520.8	1.63235
530.0	1.63165
568.2	1.62910
632.8	1.62576
647.1	1.62515
694.3	1.62335
890.0	1.61829
1060.0	1.61538

Radiation resistant analogue glass type-