

n_e 1.591471	v_e 61.01	$n_{F'} - n_{C'}$ 0.009695
n_d 1.589188	v_d 61.24	$n_F - n_C$ 0.009620

Class of bubbles	Viscosity temperature				
	η [Poise]	$10^{14.5}$	10^{13}	10^{10}	10^8
2	t [°C]	610	645	700	745

Relative partial dispersion deviations from the 'Normal Line'				
	$i - F'$	$g - F'$	$F' - e$	$F' - r$
ΔP	-0.016	-0.0017	+0.0010	-0.0024
Δv_e	-1.8	-1.1	+1.6	+3.3
	$i - F$	$g - F$	$F - e$	$F - r$
ΔP	-0.016	-0.0014	+0.0011	-0.0019
Δv_d	-1.6	-0.8	+2.0	+3.5

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
2.30	0.56	0.65	0.69	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 $\alpha_{20/t} \cdot 10^7$ [°C]	Chemical resistance	
			Stain resistance	Group
8430	3342			III
Poisson's ratio μ	Density ρ [$\text{g} \cdot \text{cm}^{-3}$]	+20 ÷ -60°C	+20 ÷ +120°C	Weather resistance
		52	58	
0.261	3.24			A

Optical density increment on irradiation		
Initial density D_0 [cm^{-1}]	Radiation dose [R]	Optical density increment ΔD [cm^{-1}]
0.048	$1 \cdot 10^4$	0.040
	$1 \cdot 10^5$	0.34

Refractive indices		
λ [nm]	n	
312.6	-	-
334.1	-	-
365.0	i	1.61262
404.66	h	1.60532
435.83	g	1.601042
479.99	F'	1.596406
486.13	F	1.595862
546.07	e	1.591471
587.56	d	1.589188
589.29	D	1.589100
643.85	C'	1.586711
656.27	C	1.586242
706.52	r	1.58457
768.2	-	1.58287
852.1	-	1.58100
1013.9	-	1.57821
1128.6	-	1.57657
1395.1	-	1.57316
1529.6	-	1.57145
1813.1	-	1.56765
1970.1	-	1.56533
2249.3	-	1.56074
2325.4	-	1.55937

Dispersion coefficients	
$v_h = \frac{n_h - 1}{n_i - n_g}$	52.3
$v_e = \frac{n_e - 1}{n_{F'} - n_{C'}}$	61.01
$v_d = \frac{n_d - 1}{n_F - n_C}$	61.24
$v_D = \frac{n_D - 1}{n_F - n_C}$	61.23
$v_{1529.6} = \frac{n_{1529.6} - 1}{n_{1013.9} - n_{2249.3}}$	32.7

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	0.753	0.759
h - g	0.4413	0.4446
g - F	0.5343	0.5384
g - F'	0.4782	0.4819
F - e	0.4529	0.4564
F - D	0.6975	0.7029
F' - e	0.5090	0.5130
d - D	0.0091	0.0090
D - C	0.2948	0.2971
e - C'	0.4910	0.4948
e - C	0.5393	0.5436
C' - r	0.221	0.223
C - r	0.173	0.174
r - 852.1	0.368	0.371
852.1 - 1013.9	0.288	0.290
1013.9 - 1128.6	0.169	0.170
1128.6 - 1395.1	0.353	0.355
1395.1 - 1529.6	0.176	0.177
1529.6 - 1813.1	0.393	0.396
1813.1 - 1970.1	0.238	0.240
1970.1 - 2249.3	0.474	0.477
2249.3 - 2325.4	0.141	0.143

Internal transmittance		
λ [nm]	τ_i (s=10mm)	τ_i (s=25mm)
280	-	-
300	-	-
320	0.051	-
340	0.385	0.092
360	0.776	0.530
380	0.931	0.836
400	0.960	0.903
420	0.984	0.960
440	0.986	0.966
460	0.989	0.972
480	0.992	0.980
500	0.994	0.985
520	0.995	0.987
540	0.995	0.987
560	0.995	0.987
580	0.994	0.985
600	0.994	0.985
620	0.994	0.985
640	0.994	0.985
660	0.994	0.985
680	0.994	0.985
700	0.994	0.985
750	0.994	0.985
800	0.994	0.985
900	0.992	0.980
1000	0.992	0.980
1050	0.992	0.980
1100	0.992	0.980
1200	0.993	0.983
1300	0.993	0.983
1400	0.983	0.958
1500	0.987	0.968

Refractive indices at laser wavelengths	
λ [nm]	n
350.7	-
356.4	-
488.0	1.59570
514.0	1.59363
520.8	1.59314
530.0	1.59251
568.2	1.59019
632.8	1.58715
647.1	1.58659
694.3	1.58495
890.0	1.58027
1060.0	1.57753

Radiation resistant analogue glass type-

TK123