

n_e 1.820573	v_e 33.17	$n_{F'} - n_{C'}$ 0.024740
n_d 1.814808	v_d 33.42	$n_F - n_C$ 0.024380

Class of bubbles	Viscosity temperature				
	η [Poise]	$10^{14.5}$	10^{13}	10^{10}	10^8
4	t [°C]	630	655	710	750

Relative partial dispersion deviations from the 'Normal Line'				
	$i - F'$	$g - F'$	$F' - e$	$F' - r$
ΔP	+0.051	+0.0036	+0.0005	+0.0001
Δv_e	+5.5	+2.4	+1.0	-0.2
	$i - F$	$g - F$	$F - e$	$F - r$
ΔP	+0.053	+0.0041	+0.0004	+0.0002
Δv_d	+5.3	+2.3	+0.7	-0.4

Stress optical coefficient B [$nm \cdot cm^{-1} / kp \cdot cm^{-2}$], $\lambda = 550nm$	Thermal conductivity			
	-50°C	0°C	+20°C	+50°C
1.85	-	-	-	-

Young's modulus E [$kp \cdot mm^{-2}$]	Shear modulus G [$kp \cdot mm^{-2}$]	Coefficient of linear thermal expansion $\alpha_{20/t}$ 10^7 [°C]	Chemical resistance		
			Stain resistance		
10470	4020		Group	II	
Poisson's ratio μ	Density ρ [$g \cdot cm^{-3}$]	+20 ÷ -60°C	+20 ÷ +120°C	Weather resistance	
0.302	4.22	68	73	Group	A

Optical density increment on irradiation		
Initial density D_0 [cm^{-1}]	Radiation dose [R]	Optical density increment ΔD [cm^{-1}]
0.076	$1 \cdot 10^4$	0.050
	$1 \cdot 10^5$	0.15

Refractive indices		
λ [nm]	n	
312.6	-	-
334.1	-	-
365.0	i	1.88303
404.66	h	1.85928
435.83	g	1.846533
479.99	F'	1.833550
486.13	F	1.832076
546.07	e	1.820573
587.56	d	1.814808
589.29	D	1.814600
643.85	C'	1.808810
656.27	C	1.807696
706.52	r	1.80378
768.2	-	1.79996
852.1	-	1.79595
1013.9	-	1.79045
1128.6	-	1.78754
1395.1	-	1.78218
1529.6	-	1.77980
1813.1	-	1.77491
1970.1	-	1.77213
2249.3	-	1.76687
2325.4	-	1.76534

Dispersion coefficients	
$v_h = \frac{n_h - 1}{n_i - n_g}$	23.5
$v_e = \frac{n_e - 1}{n_{F'} - n_{C'}}$	33.17
$v_d = \frac{n_d - 1}{n_F - n_C}$	33.42
$v_D = \frac{n_D - 1}{n_F - n_C}$	33.41
$v_{1529.6} = \frac{n_{1529.6} - 1}{n_{1013.9} - n_{2249.3}}$	33.1

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	0.960	0.974
h - g	0.5153	0.5229
g - F	0.5844	0.5930
g - F'	0.4248	0.5325
F - e	0.4650	0.4718
F - D	0.7064	0.7168
F' - e	0.5245	0.5323
d - D	0.0084	0.0085
D - C	0.2791	0.2832
e - C'	0.4755	0.4825
e - C	0.5205	0.5282
C' - r	0.203	0.206
C - r	0.158	0.161
r - 852.1	0.317	0.321
852.1 - 1013.9	0.222	0.226
1013.9 - 1128.6	0.118	0.119
1128.6 - 1395.1	0.217	0.220
1395.1 - 1529.6	0.096	0.098
1529.6 - 1813.1	0.198	0.201
1813.1 - 1970.1	0.112	0.114
1970.1 - 2249.3	0.213	0.216
2249.3 - 2325.4	0.062	0.062

Internal transmittance		
λ [nm]	τ_i (s=10mm)	τ_i (s=25mm)
280	-	-
300	-	-
320	-	-
340	-	-
360	0.045	-
380	0.651	0.342
400	0.860	0.686
420	0.930	0.834
440	0.950	0.880
460	0.963	0.910
480	0.973	0.934
500	0.981	0.953
520	0.987	0.968
540	0.991	0.978
560	0.993	0.983
580	0.995	0.987
600	0.996	0.990
620	0.997	0.993
640	0.997	0.993
660	0.997	0.993
680	0.998	0.995
700	0.998	0.995
750	0.999	0.997
800	0.999	0.998
900	0.999	0.998
1000	0.999	0.998
1050	0.999	0.998
1100	0.999	0.998
1200	0.999	0.998
1300	0.999	0.998
1400	0.999	0.998
1500	0.999	0.998

Refractive indices at laser wavelengths	
λ [nm]	n
350.7	-
356.4	-
488.0	1.67718
514.0	1.67298
520.8	1.67200
530.0	1.67074
568.2	1.66621
632.8	1.66045
647.1	1.65941
694.3	1.65644
890.0	1.64856
1060.0	1.64452

Radiation resistant analogue glass type-