

n_e 1.578326	v_e 41.03	$n_{F'} - n_{C'}$ 0.014094
n_d 1.575022	v_d 41.31	$n_F - n_C$ 0.013920

Class of bubbles	Viscosity temperature				
	η [Poise]	$10^{14.5}$	10^{13}	10^{10}	10^8
2	t [°C]	420	470	575	665

Relative partial dispersion deviations from the 'Normal Line'				
	$i - F'$	$g - F'$	$F' - e$	$F' - r$
ΔP	-0.007	-0.0007	-0.0007	+/-0
Δv_e	-0.7	-0.5	-1.2	-0.1
	$i - F$	$g - F$	$F - e$	$F - r$
ΔP	-0.007	-0.0007	-0.0007	+0.0001
Δv_d	-0.7	-0.4	-1.2	-0.2

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
3.25	0.58	0.62	0.64	0.68

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	
5670	2355			I	
Poisson's ratio μ	Density ρ [$\text{g} \cdot \text{cm}^{-3}$]	+20 ÷ -60°C	+20 ÷ +120°C	Weather resistance	
		67	72	Group	A
0.204	3.23				

Optical density increment on irradiation		
Initial density D_0 [cm^{-1}]	Radiation dose [R]	Optical density increment ΔD [cm^{-1}]
0.046	$1 \cdot 10^4$	0.070
	$1 \cdot 10^5$	0.50

Refractive indices		
λ [nm]	n	
312.6	-	-
334.1	-	-
365.0	i	1.61197
404.66	h	1.59968
435.83	g	1.592809
479.99	F'	1.585638
486.13	F	1.584815
546.07	e	1.578326
587.56	d	1.575022
589.29	D	1.574900
643.85	C'	1.571544
656.27	C	1.570895
706.52	r	1.56860
768.2	-	1.56634
852.1	-	1.56393
1013.9	-	1.56056
1128.6	-	1.55872
1395.1	-	1.55521
1529.6	-	1.55359
1813.1	-	1.55016
1970.1	-	1.54816
2249.3	-	1.54429
2325.4	-	1.54316

Dispersion coefficients	
$v_h = \frac{n_h - 1}{n_i - n_g}$	31.3
$v_e = \frac{n_e - 1}{n_{F'} - n_{C'}}$	41.03
$v_d = \frac{n_d - 1}{n_F - n_C}$	41.31
$v_D = \frac{n_D - 1}{n_F - n_C}$	41.30
$v_{1529.6} = \frac{n_{1529.6} - 1}{n_{1013.9} - n_{2249.3}}$	34.0

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	0.872	0.883
h - g	0.4875	0.4936
g - F	0.5672	0.5743
g - F'	0.5088	0.5152
F - e	0.4604	0.4662
F - D	0.7035	0.7123
F' - e	0.5188	0.5253
d - D	0.0087	0.0088
D - C	0.2842	0.2877
e - C'	0.4812	0.4872
e - C	0.5273	0.5338
C' - r	0.209	0.211
C - r	0.163	0.165
r - 852.1	0.331	0.335
852.1 - 1013.9	0.239	0.242
1013.9 - 1128.6	0.130	0.132
1128.6 - 1395.1	0.249	0.252
1395.1 - 1529.6	0.115	0.116
1529.6 - 1813.1	0.243	0.246
1813.1 - 1970.1	0.142	0.144
1970.1 - 2249.3	0.274	0.278
2249.3 - 2325.4	0.080	0.081

Internal transmittance		
λ [nm]	τ_i (s=10mm)	τ_i (s=25mm)
280	-	-
300	-	-
320	0.04	-
340	0.639	0.327
360	0.907	0.783
380	0.951	0.882
400	0.987	0.968
420	0.989	0.972
440	0.989	0.972
460	0.992	0.980
480	0.992	0.980
500	0.994	0.985
520	0.995	0.987
540	0.995	0.987
560	0.995	0.981
580	0.995	0.987
600	0.995	0.987
620	0.994	0.985
640	0.993	0.983
660	0.994	0.985
680	0.995	0.987
700	0.996	0.990
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	0.997	0.993
1400	0.995	0.987
1500	0.995	0.987

Refractive indices at laser wavelengths	
λ [nm]	n
350.7	-
356.4	-
488.0	1.58457
514.0	1.58149
520.8	1.58076
530.0	1.57983
568.2	1.57647
632.8	1.57215
647.1	1.57137
694.3	1.56912
890.0	1.56303
1060.0	1.55979

Radiation resistant analogue glass type-

LF105