

n_e 1.659961	v_e 50.82	$n_{F'} - n_{C'}$ 0.0129886
n_d 1.656914	v_d 51.12	$n_F - n_C$ 0.012850

Class of bubbles	Viscosity temperature				
	η [Poise]	$10^{14.5}$	10^{13}	10^{10}	10^8
1	t [°C]	585	630	690	745

Relative partial dispersion deviations from the 'Normal Line'				
	$i - F'$	$g - F'$	$F' - e$	$F' - r$
ΔP	-0.025	-0.0013	+0.0014	-0.0028
Δv_e	-2.7	-0.9	+2.5	+3.9
	$i - F$	$g - F$	$F - e$	$F - r$
ΔP	-0.024	-0.0008	+0.0016	-0.0022
Δv_d	-2.4	-0.4	+2.8	+4.0

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
1.95	-	-	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
7940	3082			III
Poisson's ratio μ	Density ρ [$\text{g}\cdot\text{cm}^{-3}$]	+20 ÷ -60°C	+20 ÷ +120°C	Weather resistance
		73	81	
0.288	3.98			A

Optical density increment on irradiation		
Initial density D_0 [cm^{-1}]	Radiation dose [R]	Optical density increment ΔD [cm^{-1}]
0.056	$1 \cdot 10^4$	0.045
	$1 \cdot 10^5$	0.27

Refractive indices		
λ [nm]	n	
312.6	-	-
334.1	-	-
365.0	i	1.68949
404.66	h	1.67908
435.83	g	1.673064
479.99	F'	1.666653
486.13	F	1.665908
546.07	e	1.659961
587.56	d	1.656914
589.29	D	1.656800
643.85	C'	1.653667
656.27	C	1.653058
706.52	r	1.65090
768.2	-	1.64876
852.1	-	1.64648
1013.9	-	1.64326
1128.6	-	1.64150
1395.1	-	1.63814
1529.6	-	1.63660
1813.1	-	1.63336
1970.1	-	1.63149
2249.3	-	1.62793
2325.4	-	1.62690

Dispersion coefficients	
$v_h = \frac{n_h - 1}{n_i - n_g}$	41.13
$v_e = \frac{n_e - 1}{n_{F'} - n_{C'}}$	50.82
$v_d = \frac{n_d - 1}{n_F - n_C}$	51.12
$v_D = \frac{n_D - 1}{n_F - n_C}$	51.11
$v_{1529.6} = \frac{n_{1529.6} - 1}{n_{1013.9} - n_{2249.3}}$	41.5

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	0.802	0.810
h - g	0.4633	0.4682
g - F	0.5511	0.5569
g - F'	0.4937	0.4989
F - e	0.4580	0.4628
F - D	0.7014	0.7088
F' - e	0.5153	0.5208
d - D	0.0088	0.0089
D - C	0.2882	0.2912
e - C'	0.4847	0.4898
e - C	0.5316	0.5372
C' - r	0.213	0.215
C - r	0.166	0.168
r - 852.1	0.341	0.344
852.1 - 1013.9	0.248	0.251
1013.9 - 1128.6	0.135	0.137
1128.6 - 1395.1	0.259	0.261
1395.1 - 1529.6	0.119	0.120
1529.6 - 1813.1	0.249	0.252
1813.1 - 1970.1	0.144	0.145
1970.1 - 2249.3	0.274	0.277
2249.3 - 2325.4	0.079	0.080

Internal transmittance		
λ [nm]	τ_i (s=10mm)	τ_i (s=25mm)
280	-	-
300	-	-
320	-	-
340	-	-
360	-	-
380	0.887	0.741
400	0.939	0.855
420	0.967	0.919
440	0.971	0.929
460	0.976	0.941
480	0.983	0.958
500	0.989	0.972
520	0.993	0.983
540	0.995	0.987
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	0.993	0.983
680	0.994	0.985
700	0.994	0.985
750	0.994	0.985
800	0.993	0.983
900	0.992	0.980
1000	0.991	0.978
1050	0.991	0.978
1100	0.991	0.978
1200	0.992	0.980
1300	0.993	0.983
1400	0.990	0.975
1500	0.992	0.980

Refractive indices at laser wavelengths	
λ [nm]	n
350.7	-
356.4	-
488.0	1.66569
514.0	1.66288
520.8	1.66221
530.0	1.66136
568.2	1.65825
632.8	1.65424
647.1	1.65351
694.3	1.65139
890.0	1.64561
1060.0	1.64251

Radiation resistant analogue glass type-

TK121