

n_e 1.489118	v_e 69.87	$n_{F'} - n_{C'}$ 0.007001
n_d 1.487464	v_d 70.04	$n_F - n_C$ 0.006960

Class of bubbles	Viscosity temperature				
	η [Poise]	$10^{14.5}$	10^{13}	10^{10}	10^8
2	t [°C]	430	485	585	670

Relative partial dispersion deviations from the 'Normal Line'				
	$i - F'$	$g - F'$	$F' - e$	$F' - r$
ΔP	+0.034	+0.0058	+0.0022	-0.0019
Δv_e	+3.7	+3.9	+3.8	+2.7
	$i - F$	$g - F$	$F - e$	$F - r$
ΔP	+0.037	+0.0067	+0.0022	-0.0014
Δv_d	+3.6	+3.8	+3.8	+2.5

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
2.90	-	-	-	-

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
6440	2622			III
Poisson's ratio μ	Density ρ [$\text{g}\cdot\text{cm}^{-3}$]	+20 ÷ -60°C	+20 ÷ +120°C	Weather resistance
		86	92	

Optical density increment on irradiation		
Initial density D_0 [cm^{-1}]	Radiation dose [R]	Optical density increment ΔD [cm^{-1}]
0.036	$1 \cdot 10^4$	0.025
	$1 \cdot 10^5$	0.10

Refractive indices		
λ [nm]	n	
312.6	-	-
334.1	-	-
365.0	i	1.50414
404.66	h	1.49900
435.83	g	1.495963
479.99	F'	1.492655
486.13	F	1.492267
546.07	e	1.489118
587.56	d	1.487464
589.29	D	1.487400
643.85	C'	1.485654
656.27	C	1.485307
706.52	r	1.48406
768.2	-	1.48277
852.1	-	1.48132
1013.9	-	1.47909
1128.6	-	1.47772
1395.1	-	1.47474
1529.6	-	1.47321
1813.1	-	1.46974
1970.1	-	1.46763
2249.3	-	1.46346
2325.4	-	1.46223

Dispersion coefficients	
$v_h = \frac{n_h - 1}{n_i - n_g}$	61.0
$v_e = \frac{n_e - 1}{n_{F'} - n_{C'}}$	69.87
$v_d = \frac{n_d - 1}{n_F - n_C}$	70.04
$v_D = \frac{n_D - 1}{n_F - n_C}$	70.03
$v_{1529.6} = \frac{n_{1529.6} - 1}{n_{1013.9} - n_{2249.3}}$	30.3

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	0.734	0.739
h - g	0.4338	0.4363
g - F	0.5279	0.5311
g - F'	0.4724	0.4752
F - e	0.4498	0.4524
F - D	0.6951	0.6993
F' - e	0.5052	0.5082
d - D	0.0091	0.0092
D - C	0.2989	0.3007
e - C'	0.4948	0.4977
e - C	0.5443	0.5476
C' - r	0.228	0.230
C - r	0.179	0.180
r - 852.1	0.390	0.392
852.1 - 1013.9	0.320	0.322
1013.9 - 1128.6	0.195	0.196
1128.6 - 1395.1	0.426	0.428
1395.1 - 1529.6	0.219	0.220
1529.6 - 1813.1	0.495	0.498
1813.1 - 1970.1	0.301	0.303
1970.1 - 2249.3	0.596	0.599
2249.3 - 2325.4	0.177	0.178

Internal transmittance		
λ [nm]	τ_i (s=10mm)	τ_i (s=25mm)
280	-	-
300	0.348	0.071
320	0.781	0.539
340	0.925	0.823
360	0.971	0.929
380	0.973	0.934
400	0.996	0.990
420	0.994	0.985
440	0.993	0.983
460	0.995	0.987
480	0.995	0.987
500	0.994	0.985
520	0.995	0.987
540	0.995	0.987
560	0.995	0.987
580	0.995	0.987
600	0.994	0.985
620	0.994	0.985
640	0.993	0.983
660	0.995	0.987
680	0.996	0.990
700	0.998	0.995
750	0.999	0.997
800	0.999	0.997
900	0.998	0.995
1000	0.998	0.995
1050	0.998	0.995
1100	0.998	0.995
1200	0.998	0.995
1300	0.998	0.995
1400	0.994	0.985
1500	0.994	0.985

Refractive indices at laser wavelengths	
λ [nm]	n
350.7	-
356.4	-
488.0	1.49216
514.0	1.49068
520.8	1.49033
530.0	1.48987
568.2	1.48820
632.8	1.48598
647.1	1.48556
694.3	1.48434
890.0	1.48075
1060.0	1.47852

Radiation resistant analogue glass type-

LK103