

Refractive Index	n_d	1.55671	Abbe Number	V_d	58.68	Dispersion	$n_F - n_C$	0.00948
	n_e	1.556711		V_e	58.41		$n_{F'} - n_{C'}$	0.009488
		1.558973					$n_{F'} - n_{C'}$	0.009569

Refractive Indices		
	λ (μm)	
n_{2325}	2.32542	1.52907
n_{1970}	1.97009	1.53423
n_{1530}	1.52958	1.53972
n_{1129}	1.12864	1.54449
n_t	1.01398	1.54604
n_s	0.85211	1.54872
$n_{A'}$	0.76819	1.55053
n_r	0.70652	1.55218
n_c	0.65627	1.55383
$n_{c'}$	0.64385	1.55429
$n_{\text{He-Ne}}$	0.6328	1.55471
n_D	0.58929	1.55663
n_d	0.58756	1.55671
n_e	0.54607	1.55897
n_F	0.48613	1.56331
$n_{F'}$	0.47999	1.56385
$n_{\text{He-Cd}}$	0.44157	1.56779
n_g	0.435835	1.56848
n_h	0.404656	1.57277
n_i	0.365015	1.58012
n_{334}	0.334148	1.58807
n_{326}	0.326106	1.59060

Thermal Properties		
Strain Point ($^{\circ}\text{C}$)	StP	
Annealing Point ($^{\circ}\text{C}$)	AP	
Transformation Temperature ($^{\circ}\text{C}$)	Tg	507
Yield Point ($^{\circ}\text{C}$)	At	547
Softening Point ($^{\circ}\text{C}$)	SP	642
Expansion Coefficient ($10^{-7}/^{\circ}\text{C}$)	α	76
		90
Thermal Conductivity ($\text{W}/\text{m}\cdot\text{K}$)	k	1.000

Mechanical Properties		
Young's Modulus ($108\text{N}/\text{m}^2$)	E	783
Rigidity Modulus ($108\text{N}/\text{m}^2$)	G	317
Poisson's Ratio	σ	0.236
Knoop Hardness	Hk	560 [6]
Abrasion	Aa	113
Photoelastic Constant ($\text{nm}/\text{cm}/10^5 \text{ Pa}$)	β	

Partial Dispersions	
$n_C - n_t$	0.007785
$n_C - n_{A'}$	0.003296
$n_d - n_C$	0.002885
$n_e - n_C$	0.005147
$n_g - n_d$	0.011768
$n_g - n_F$	0.005165
$n_h - n_g$	0.004295
$n_i - n_g$	0.011636
$n_{C'} - n_t$	0.008244
$n_e - n_{C'}$	0.004688
$n_{F'} - n_e$	0.004881
$n_i - n_{F'}$	0.016261

Deviation of Relative Partial Dispersions	
$\Delta\theta_{C,t}$	-0.0015
$\Delta\theta_{C,A'}$	0.0004
$\Delta\theta_{g,d}$	-0.0026
$\Delta\theta_{g,F}$	-0.0021
$\Delta\theta_{i,g}$	-0.0073

Constants of Dispersion Formula		
326 ~ 1129 nm		
A 1	1.28348331	
A 2	1.02800765	E-1
A 3	4.04609885	E-1
B 1	7.90900515	E-3
B 2	3.05971274	E-2
B 3	4.65268356	E1
1129 ~ 2325 nm		
A 1	1.18261390	
A 2	2.03921973	E-1
A 3	1.11763340	E-1
B 1	6.85280751	E-3
B 2	2.50893634	E-2
B 3	1.24101415	E2

Chemical Properties		
Water Resistance (Powder Group)	RW(P)	1
Acid Resistance (Powder Group)	RA(P)	1
Weathering Resistance (Surface Group)	W(S)	1~2
Acid Resistance (Surface Group)	SR	1.2
Phosphate Resistance	PR	1.0

Relative Partial Dispersions	
$\theta_{C,t}$	0.8205
$\theta_{C,A'}$	0.3474
$\theta_{d,C}$	0.3041
$\theta_{e,C}$	0.5425
$\theta_{g,d}$	1.2403
$\theta_{g,F}$	0.5444
$\theta_{h,g}$	0.4527
$\theta_{i,g}$	1.2264
$\theta'_{C,t}$	0.8615
$\theta'_{e,C'}$	0.4899
$\theta'_{F',e}$	0.5101
$\theta'_{i,F'}$	1.6993

Internal Transmittance			
λ_{80}		λ_5	

CCI		
B	G	R

Internal Transmittance		
λ (nm)	$\tau_{i10 \text{ mm}}$	$\tau_{i25 \text{ mm}}$
280		
290		
300	0.170	0.010
310	0.590	0.270
320	0.840	0.650
330	0.937	0.850
340	0.971	0.929
350	0.985	0.963
360	0.992	0.979
365	0.994	0.984
370	0.995	0.988
380	0.996	0.990
390	0.997	0.993
400	0.998	0.994
420	0.998	0.995
440	0.998	0.995
460	0.998	0.996
480	0.998	0.996
500	0.999	0.997
550	0.999	0.997
600	0.999	0.997
650	0.998	0.996
700	0.999	0.997
800	0.999	0.997
900	0.998	0.995
1000	0.996	0.990
1200	0.995	0.988
1400	0.989	0.972
1600	0.992	0.980
1800	0.984	0.961
2000	0.972	0.932
2200	0.927	0.820
2400	0.890	0.750

Other Properties									
Bubble Quality Group	B		Coloring	$\lambda_{80}/\lambda_{70}$	32				
Specific Gravity	d	2.90		λ_5	30				
Temperature Coefficients of Refractive Index									
Range of Temperature ($^{\circ}\text{C}$)	dn / dT relative ($10^{-6}/^{\circ}\text{C}$)								
	t	C'	He-Ne	D	e	F'	g	i	
-40 ~ -20	2.2	2.5	2.5	2.6	2.8	3.0	3.3	4.2	
-20 ~ 0	2.2	2.5	2.6	2.7	2.8	3.1	3.5	4.3	
0 ~ 20	2.3	2.6	2.6	2.8	2.9	3.2	3.6	4.5	
20 ~ 40	2.4	2.7	2.7	2.8	3.0	3.3	3.7	4.6	
40 ~ 60	2.4	2.8	2.8	2.9	3.1	3.4	3.8	4.8	
60 ~ 80	2.4	2.8	2.9	3.0	3.1	3.5	3.9	4.9	