

Refractive Index	n_d	1.59551	Abbe Number	V_d	39.26	Dispersion	$n_F - n_C$	0.01517
		1.595509			V_e		38.99	
	n_e	1.599108					$n_{F'} - n_{C'}$	0.015365

Refractive Indices		
	λ (μm)	
n_{2325}	2.32542	1.56224
n_{1970}	1.97009	1.56716
n_{1530}	1.52958	1.57263
n_{1129}	1.12864	1.57797
n_t	1.01398	1.57992
n_s	0.85211	1.58352
$n_{A'}$	0.76819	1.58611
n_r	0.70652	1.58855
n_c	0.65627	1.59103
$n_{c'}$	0.64385	1.59173
$n_{\text{He-Ne}}$	0.6328	1.59239
n_D	0.58929	1.59538
n_d	0.58756	1.59551
n_e	0.54607	1.59911
n_F	0.48613	1.60620
$n_{F'}$	0.47999	1.60710
$n_{\text{He-Cd}}$	0.44157	1.61377
n_g	0.435835	1.61495
n_h	0.404656	1.62249
n_i	0.365015	1.63604
n_{334}	0.334148	1.65185
n_{326}	0.326106	1.65718

Thermal Properties		
Strain Point ($^{\circ}\text{C}$)	StP	390
Annealing Point ($^{\circ}\text{C}$)	AP	426
Transformation Temperature ($^{\circ}\text{C}$)	Tg	445
Yield Point ($^{\circ}\text{C}$)	At	485
Softening Point ($^{\circ}\text{C}$)	SP	590
Expansion Coefficient α	(-30~+70 $^{\circ}\text{C}$)	85
	(+10~+300 $^{\circ}\text{C}$)	96
Thermal Conductivity (W/m·K)	k	0.878

Mechanical Properties		
Young's Modulus (108N/m ²)	E	588
Rigidity Modulus (108N/m ²)	G	241
Poisson's Ratio	σ	0.222
Knoop Hardness	Hk	400 [4]
Abrasion	Aa	151
Photoelastic Constant (nm/cm/10 ⁵ Pa)	β	2.87

Partial Dispersions	
$n_C - n_t$	0.111090
$n_C - n_{A'}$	0.004923
$n_d - n_C$	0.004479
$n_e - n_C$	0.008078
$n_g - n_d$	0.019438
$n_g - n_F$	0.008748
$n_h - n_g$	0.007545
$n_i - n_g$	0.021090
$n_{C'} - n_t$	0.011813
$n_e - n_{C'}$	0.007374
$n_{F'} - n_e$	0.007991
$n_i - n_{F'}$	0.289380

Deviation of Relative Partial Dispersions	
$\Delta\theta_{C,t}$	0.0014
$\Delta\theta_{C,A'}$	0.0011
$\Delta\theta_{g,d}$	-0.0018
$\Delta\theta_{g,F}$	-0.0012
$\Delta\theta_{i,g}$	-0.0060

Constants of Dispersion Formula		
326 ~ 1129 nm		
A 1	1.35351322	
A 2	1.30212912	E-1
A 3	1.58337266	E-1
B 1	1.05624626	E-2
B 2	4.96606652	E-2
B 3	2.07965806	E1
1129 ~ 2325 nm		
A 1	1.33265695	
A 2	1.51642865	E-1
A 3	1.00238959	E-1
B 1	1.00208464	E-2
B 2	4.78779669	E-2
B 3	1.19439670	E2

Chemical Properties		
Water Resistance (Powder Group)	RW(P)	2
Acid Resistance (Powder Group)	RA(P)	1
Weathering Resistance (Surface Group)	W(S)	1
Acid Resistance (Surface Group)	SR	1.0
Phosphate Resistance	PR	2.0

Relative Partial Dispersions	
$\theta_{C,t}$	0.7323
$\theta_{C,A'}$	0.3245
$\theta_{d,C}$	0.2953
$\theta_{e,C}$	0.5325
$\theta_{g,d}$	1.2814
$\theta_{g,F}$	0.5767
$\theta_{h,g}$	0.4974
$\theta_{i,g}$	1.3903
$\theta'_{C,t}$	0.7688
$\theta'_{e,C'}$	0.4799
$\theta'_{F',e}$	0.5201
$\theta'_{i,F'}$	1.8834

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		
310		
320	0.170	0.010
330	0.650	0.340
340	0.890	0.750
350	0.996	0.918
360	0.987	0.968
365	0.991	0.977
370	0.993	0.983
380	0.996	0.990
390	0.997	0.993
400	0.998	0.995
420	0.998	0.996
440	0.998	0.996
460	0.998	0.996
480	0.999	0.997
500	0.999	0.998
550	0.999	0.998
600	0.999	0.998
650	0.999	0.998
700	0.999	0.998
800	0.999	0.998
900	0.999	0.998
1000	0.998	0.995
1200	0.998	0.995
1400	0.995	0.988
1600	0.994	0.986
1800	0.981	0.953
2000	0.960	0.903
2200	0.916	0.800
2400	0.880	0.740

Other Properties									
Bubble Quality Group	B		Coloring	$\lambda_{80}/\lambda_{70}$	34				
Specific Gravity	d	3.36		λ_5		32			
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	1.9	2.6	2.7	2.9	3.2	3.8	4.6	6.8	
-20 ~ 0	2.0	2.7	2.8	3.0	3.3	4.0	4.8	7.1	
0 ~ 20	2.1	2.9	2.9	3.2	3.5	4.2	5.0	7.4	
20 ~ 40	2.2	3.0	3.0	3.3	3.6	4.4	5.2	7.7	
40 ~ 60	2.3	3.1	3.2	3.4	3.8	4.5	5.4	8.0	
60 ~ 80	2.5	3.3	3.3	3.5	3.9	4.7	5.6	8.3	