

Refractive Index	n_d	1,66998 1,669979	Abbe Number	ν_d	39,27	Dispersion	$n_F - n_C$	0,017061
Refractive Index	n_e	1,674022	Abbe Number	ν_e	38,99	Dispersion	$n_F - n_{C'}$	0,017287

Refractive Indices		
$\lambda(\mu m)$		
n_{2325}	2.32542	1,63134
n_{1970}	1.97009	1,63728
n_{1530}	1.52958	1,64386
n_{1129}	1.12864	1,65013
n_t	1.01398	1,65237
n_s	0.85211	1,65648
$n_{A'}$	0.76819	1,65941
n_r	0.70652	1,66216
n_C	0.65627	1,66495
$n_{C'}$	0.64385	1,66574
n_{He-Ne}	0.6328	1,66648
n_D	0.58929	1,66983
n_d	0.58756	1,66998
n_e	0.54607	1,67402
n_F	0.48613	1,68201
$n_{F'}$	0.47999	1,68303
n_{He-Cd}	0.44157	1,69059
n_g	0.435835	1,69193
n_h	0.404656	1,70056
n_i	0.365015	1,71630

Constants of Dispersion Formula	
A ₁	1,58023630E+00
A ₂	1,37504632E-01
A ₃	1,60603298E+00
B ₁	1,03578062E-02
B ₂	5,48393088E-02
B ₃	1,47982885E+02

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

Mechanical Properties	
Young's Modulus E (10 ⁹ N/m ²)	904
Rigidity Modulus G (10 ⁹ N/m ²)	359
Poisson's Ratio σ	0,260
Knoop Hardness Hk [Class]	580 6
Abrasion Aa	138
Photoelastic Constant β (nm/cm/10 ⁵ Pa)	2,74

Partial Dispersions	
$n_C - n_t$	0,012577
$n_C - n_{A'}$	0,005542
$n_d - n_C$	0,005030
$n_e - n_C$	0,009073
$n_g - n_d$	0,021950
$n_g - n_F$	0,009919
$n_h - n_g$	0,008632
$n_i - n_g$	0,024370
$n_{C'} - n_t$	0,013368
$n_e - n_{C'}$	0,008282
$n_{F'} - n_e$	0,009005
$n_i - n_{F'}$	0,033272

Relative Partial Dispersion	
$\theta_{C,t}$	0,7372
$\theta_{C,A'}$	0,3248
$\theta_{d,C}$	0,2948
$\theta_{e,C}$	0,5318
$\theta_{g,d}$	1,2866
$\theta_{g,F}$	0,5814
$\theta_{h,g}$	0,5059
$\theta_{i,g}$	1,4284
$\theta'_{C,t}$	0,7733
$\theta'_{e,C'}$	0,4791
$\theta'_{F,e}$	0,5209
$\theta'_{i,F'}$	1,9247

Deviation of Relative Dispersions	
$\Delta \theta_{C,t}$	0,0063
$\Delta \theta_{C,A'}$	0,0013
$\Delta \theta_{g,d}$	0,0034
$\Delta \theta_{g,F}$	0,0035
$\Delta \theta_{i,g}$	0,0322

Thermal Properties	
Strain Point STP (°C)	546
Annealing Point AP (°C)	563
Transformation Temperature Tg (°C)	608
Yield Point At (°C)	657
Softening Point SP (°C)	726
Expansion Coefficients (-30~+70°C)	69
α (10 ⁻⁷ /°C) (+100~+300°C)	78
Thermal Conductivity k (W/m·K)	0,921

Coloring			
λ_{80}	400	λ_5	355
λ_{70}			

Internal Transmittance			
$\lambda_{0.80}$	385	$\lambda_{0.05}$	357

CCI		
B	G	R
0,00	1,79	1,85

Internal Transmittance	
$\lambda(nm)$	τ 10mm
280	
290	
300	
310	
320	
330	
340	
350	
360	0,16
370	0,51
380	0,74
390	0,85
400	0,910
420	0,955
440	0,971
460	0,978
480	0,984
500	0,988
550	0,994
600	0,994
650	0,994
700	0,996
800	0,998
900	0,997
1000	0,997
1200	0,996
1400	0,992
1600	0,993
1800	0,988
2000	0,980
2200	0,948
2400	0,88

Temperature Coefficients of Refractive Index							
Range of Temperature (°C)	dn/dT relative (10 ⁻⁶ /°C)						
	t	C'	He-Ne	D	e	F'	g
-40~-20	3,7	4,3	4,3	4,6	4,8	5,4	6,2
-20~0	3,7	4,4	4,4	4,7	4,9	5,6	6,4
0~20	3,7	4,4	4,5	4,7	5,0	5,7	6,5
20~40	3,8	4,5	4,6	4,8	5,1	5,9	6,7
40~60	3,8	4,6	4,7	4,9	5,3	6,0	6,9
60~80	3,8	4,7	4,8	5,0	5,4	6,2	7,1

Other Properties	
Bubble Quality Group B	
Density d	3,26
Remarks	