

Refractive Index	n_d	1,57501 1,575006	Abbe Number	ν_d	41,50	Dispersion	$n_F - n_C$	0,013854
Refractive Index	n_e	1,578291	Abbe Number	ν_e	41,22	Dispersion	$n_F - n_{C'}$	0,014028

Refractive Indices		
$\lambda(\mu m)$		
n_{2325}	2.32542	1,54162
n_{1970}	1.97009	1,54707
n_{1530}	1.52958	1,55304
n_{1129}	1.12864	1,55855
n_t	1.01398	1,56047
n_s	0.85211	1,56392
$n_{A'}$	0.76819	1,56635
n_r	0.70652	1,56861
n_C	0.65627	1,57090
$n_{C'}$	0.64385	1,57155
n_{He-Ne}	0.6328	1,57216
n_D	0.58929	1,57488
n_d	0.58756	1,57501
n_e	0.54607	1,57829
n_F	0.48613	1,58476
$n_{F'}$	0.47999	1,58558
n_{He-Cd}	0.44157	1,59167
n_g	0.435835	1,59275
n_h	0.404656	1,59966
n_i	0.365015	1,61218

Constants of Dispersion Formula	
A ₁	1,31433154E+00
A ₂	1,12300168E-01
A ₃	1,41390100E+00
B ₁	9,50404477E-03
B ₂	5,24112772E-02
B ₃	1,48429972E+02

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

Mechanical Properties	
Young's Modulus E (10 ⁹ N/m ²)	74,9
Rigidity Modulus G (10 ⁹ N/m ²)	30,8
Poisson's Ratio σ	0,217
Knoop Hardness Hk [Class]	540 5
Abrasion Aa	125
Photoelastic Constant β (nm/cm/10 ⁵ Pa)	2,81

Partial Dispersions	
$n_C - n_t$	0,010433
$n_C - n_{A'}$	0,004553
$n_d - n_C$	0,004104
$n_e - n_C$	0,007389
$n_g - n_d$	0,017739
$n_g - n_F$	0,007989
$n_h - n_g$	0,006918
$n_i - n_g$	0,019440
$n_{C'} - n_t$	0,011080
$n_e - n_{C'}$	0,006742
$n_F - n_e$	0,007286
$n_i - n_F$	0,026608

Relative Partial Dispersion	
$\theta_{C,t}$	0,7531
$\theta_{C,A'}$	0,3286
$\theta_{d,C}$	0,2962
$\theta_{e,C}$	0,5333
$\theta_{g,d}$	1,2804
$\theta_{g,F}$	0,5767
$\theta_{h,g}$	0,4994
$\theta_{i,g}$	1,4032
$\theta'_{C,t}$	0,7898
$\theta'_{e,C'}$	0,4806
$\theta'_{F,e}$	0,5194
$\theta'_{i,F'}$	1,8968

Deviation of Relative Dispersions	
$\Delta \theta_{C,t}$	0,0117
$\Delta \theta_{C,A'}$	0,0024
$\Delta \theta_{g,d}$	0,0019
$\Delta \theta_{g,F}$	0,0024
$\Delta \theta_{i,g}$	0,0257

Thermal Properties	
Strain Point STP (°C)	511
Annealing Point AP (°C)	547
Transformation Temperature Tg (°C)	562
Yield Point At (°C)	599
Softening Point SP (°C)	700
Expansion Coefficients (-30~+70°C)	74
α (10 ⁻⁷ /°C) (+100~+300°C)	89
Thermal Conductivity k (W/m·K)	1,07

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	2,4	2,9	3,0	3,1	3,3	3,9	4,5
-20~0	2,4	2,9	3,0	3,2	3,4	4,0	4,6
0~20	2,5	3,0	3,0	3,2	3,5	4,0	4,7
20~40	2,5	3,0	3,1	3,3	3,5	4,1	4,8
40~60	2,5	3,0	3,1	3,3	3,6	4,2	4,9
60~80	2,5	3,1	3,1	3,3	3,6	4,3	5,0

Coloring			
λ_{80}	380	λ_5	350
λ_{70}			

Internal Transmittance			
$\lambda_{0.80}$	371	$\lambda_{0.05}$	350

CCI		
B	G	R
0,00	0,45	0,47

Internal Transmittance	
$\lambda(nm)$	τ 10mm
280	
290	
300	
310	
320	
330	
340	
350	0,05
360	0,44
370	0,78
380	0,913
390	0,961
400	0,979
420	0,990
440	0,993
460	0,994
480	0,995
500	0,996
550	0,998
600	0,998
650	0,998
700	0,998
800	0,999
900	0,999
1000	0,998
1200	0,998
1400	0,994
1600	0,993
1800	0,978
2000	0,955
2200	0,89
2400	0,87

Other Properties	
Density d	2,58