

Refractive Index	n_d	1,74100 1,740999	Abbe Number	ν_d	52,64	Dispersion	$n_F - n_C$	0,014078
Refractive Index	n_e	1,744354	Abbe Number	ν_e	52,41	Dispersion	$n_F - n_{C'}$	0,014203

Refractive Indices		
$\lambda(\mu m)$		
n_{2325}	2.32542	1,70016
n_{1970}	1.97009	1,70787
n_{1530}	1.52958	1,71598
n_{1129}	1.12864	1,72297
n_t	1.01398	1,72525
n_s	0.85211	1,72918
$n_{A'}$	0.76819	1,73186
n_r	0.70652	1,73430
n_C	0.65627	1,73673
$n_{C'}$	0.64385	1,73741
n_{He-Ne}	0.6328	1,73804
n_D	0.58929	1,74087
n_d	0.58756	1,74100
n_e	0.54607	1,74435
n_F	0.48613	1,75080
$n_{F'}$	0.47999	1,75161
n_{He-Cd}	0.44157	1,75748
n_g	0.435835	1,75850
n_h	0.404656	1,76491
n_i	0.365015	1,77589

Constants of Dispersion Formula	
A ₁	1,11073292E+00
A ₂	8,59347773E-01
A ₃	1,26707433E+00
B ₁	4,64181248E-03
B ₂	1,92989261E-02
B ₃	8,73917698E+01

Chemical Properties	
Water Resistance (Powder) Group RW(P)	1
Acid Resistance (Powder) Group RA(P)	4
Weathering Resistance (Surface) Group	1~2
Acid Resistance (Surface) Group SR	51.0
Phosphate Resistance PR	2.0

Mechanical Properties	
Young's Modulus E (10 ⁹ N/m ²)	119,0
Rigidity Modulus G (10 ⁹ N/m ²)	46,1
Poisson's Ratio σ	0,291
Knoop Hardness Hk [Class]	720 7
Abrasion Aa	71
Photoelastic Constant β (nm/cm/10 ⁵ Pa)	1,55

Partial Dispersions	
$n_C - n_t$	0,011481
$n_C - n_{A'}$	0,004871
$n_d - n_C$	0,004272
$n_e - n_C$	0,007627
$n_g - n_d$	0,017502
$n_g - n_F$	0,007696
$n_h - n_g$	0,006413
$n_i - n_g$	0,017393
$n_{C'} - n_t$	0,012160
$n_e - n_{C'}$	0,006948
$n_F - n_e$	0,007255
$n_i - n_F$	0,024285

Relative Partial Dispersion	
$\theta_{C,t}$	0,8155
$\theta_{C,A'}$	0,3460
$\theta_{d,C}$	0,3035
$\theta_{e,C}$	0,5418
$\theta_{g,d}$	1,2432
$\theta_{g,F}$	0,5467
$\theta_{h,g}$	0,4555
$\theta_{i,g}$	1,2355
$\theta'_{C,t}$	0,8562
$\theta'_{e,C'}$	0,4892
$\theta'_{F,e}$	0,5108
$\theta'_{i,F'}$	1,7099

Deviation of Relative Dispersions	
$\Delta \theta_{C,t}$	0,0218
$\Delta \theta_{C,A'}$	0,0063
$\Delta \theta_{g,d}$	-0,0122
$\Delta \theta_{g,F}$	-0,0096
$\Delta \theta_{i,g}$	-0,0487

Thermal Properties	
Strain Point STP (°C)	631
Annealing Point AP (°C)	646
Transformation Temperature Tg (°C)	653
Yield Point At (°C)	688
Softening Point SP (°C)	724
Expansion Coefficients (-30~+70°C)	57
α (10 ⁻⁷ /°C) (+100~+300°C)	70
Thermal Conductivity k (W/m·K)	0,861

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

Coloring			
λ_{80}	365	λ_5	280
λ_{70}			

Internal Transmittance			
$\lambda_{0.80}$	358	$\lambda_{0.05}$	296

CCI		
B	G	R
0,00	0,58	0,59

Internal Transmittance	
$\lambda(nm)$	τ 10mm
280	
290	0,02
300	0,07
310	0,15
320	0,27
330	0,43
340	0,59
350	0,72
360	0,82
370	0,89
380	0,935
390	0,958
400	0,971
420	0,982
440	0,988
460	0,991
480	0,994
500	0,996
550	0,997
600	0,997
650	0,997
700	0,998
800	0,998
900	0,998
1000	0,998
1200	0,998
1400	0,994
1600	0,994
1800	0,985
2000	0,959
2200	0,88
2400	0,62

Other Properties	
Density d	4,04