

Refractive Index	n_d	1,85026 1,850259	Abbe Number	ν_d	32,27	Dispersion	$n_F - n_C$	0,026349
Refractive Index	n_e	1,856493	Abbe Number	ν_e	32,03	Dispersion	$n_F - n_{C'}$	0,026744

Refractive Indices		
$\lambda(\mu m)$		
n_{2325}	2.32542	1,80095
n_{1970}	1.97009	1,80685
n_{1530}	1.52958	1,81380
n_{1129}	1.12864	1,82133
n_t	1.01398	1,82429
n_s	0.85211	1,83004
$n_{A'}$	0.76819	1,83430
n_r	0.70652	1,83838
n_C	0.65627	1,84259
$n_{C'}$	0.64385	1,84378
n_{He-Ne}	0.6328	1,84491
n_D	0.58929	1,85003
n_d	0.58756	1,85026
n_e	0.54607	1,85649
n_F	0.48613	1,86893
$n_{F'}$	0.47999	1,87053
n_{He-Cd}	0.44157	1,88243
n_g	0.435835	1,88456
n_h	0.404656	1,89827
n_i	0.365015	

Constants of Dispersion Formula	
A ₁	1,98280031E+00
A ₂	3,16758450E-01
A ₃	2,44472646E+00
B ₁	1,18987459E-02
B ₂	5,27156001E-02
B ₃	2,13220697E+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	2.0
Phosphate Resistance PR	1.0

Mechanical Properties	
Young's Modulus E (10 ⁹ N/m ²)	110,0
Rigidity Modulus G (10 ⁹ N/m ²)	42,9
Poisson's Ratio σ	0,281
Knoop Hardness Hk [Class]	590 6
Abrasion Aa	136
Photoelastic Constant β (nm/cm/10 ⁵ Pa)	1,52

Partial Dispersions	
$n_C - n_t$	0,018292
$n_C - n_{A'}$	0,008288
$n_d - n_C$	0,007673
$n_e - n_C$	0,013907
$n_g - n_d$	0,034299
$n_g - n_F$	0,015623
$n_h - n_g$	0,013716
$n_i - n_g$	
$n_{C'} - n_t$	0,019490
$n_e - n_{C'}$	0,012709
$n_F - n_e$	0,014035
$n_i - n_F$	

Relative Partial Dispersion	
$\theta_{C,t}$	0,6942
$\theta_{C,A'}$	0,3145
$\theta_{d,C}$	0,2912
$\theta_{e,C}$	0,5278
$\theta_{g,d}$	1,3017
$\theta_{g,F}$	0,5929
$\theta_{h,g}$	0,5206
$\theta_{i,g}$	
$\theta'_{C,t}$	0,7288
$\theta'_{e,C'}$	0,4752
$\theta'_{F,e}$	0,5248
$\theta'_{i,F'}$	

Deviation of Relative Dispersions	
$\Delta \theta_{C,t}$	-0,0039
$\Delta \theta_{C,A'}$	-0,0005
$\Delta \theta_{g,d}$	0,0040
$\Delta \theta_{g,F}$	0,0036
$\Delta \theta_{i,g}$	

Thermal Properties	
Strain Point STP (°C)	656
Annealing Point AP (°C)	685
Transformation Temperature Tg (°C)	707
Yield Point At (°C)	752
Softening Point SP (°C)	802
Expansion Coefficients (-30~+70°C)	77
α (10 ⁻⁷ /°C) (+100~+300°C)	91
Thermal Conductivity k (W/m·K)	0,874

Coloring			
λ_{80}		λ_5	370
λ_{70}	425		

Internal Transmittance			
$\lambda_{0.80}$	417	$\lambda_{0.05}$	364

CCI		
B	G	R
0,00	6,64	6,89

Internal Transmittance	
$\lambda(nm)$	τ 10mm
280	
290	
300	
310	
320	
330	
340	
350	
360	0,01
370	0,11
380	0,29
390	0,49
400	0,65
420	0,83
440	0,913
460	0,945
480	0,963
500	0,976
550	0,992
600	0,995
650	0,995
700	0,997
800	0,998
900	0,999
1000	0,999
1200	0,999
1400	0,999
1600	0,998
1800	0,993
2000	0,989
2200	0,982
2400	0,959

Other Properties	
Density d	4,36

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