

Refractive Index	n_d	1,71736 1,717362	Abbe Number	ν_d	29,52	Dispersion	$n_F - n_C$	0,024303
Refractive Index	n_e	1,723098	Abbe Number	ν_e	29,28	Dispersion	$n_F - n_{C'}$	0,024694

Refractive Indices		
$\lambda(\mu m)$		
n_{2325}	2.32542	1,67018
n_{1970}	1.97009	1,67636
n_{1530}	1.52958	1,68344
n_{1129}	1.12864	1,69075
n_t	1.01398	1,69353
n_s	0.85211	1,69885
$n_{A'}$	0.76819	1,70275
n_r	0.70652	1,70649
n_C	0.65627	1,71033
$n_{C'}$	0.64385	1,71143
n_{He-Ne}	0.6328	1,71246
n_D	0.58929	1,71715
n_d	0.58756	1,71736
n_e	0.54607	1,72310
n_F	0.48613	1,73463
$n_{F'}$	0.47999	1,73612
n_{He-Cd}	0.44157	1,74732
n_g	0.435835	1,74933
n_h	0.404656	1,76247
n_i	0.365015	

Constants of Dispersion Formula	
A ₁	1,60326759E+00
A ₂	2,42980935E-01
A ₃	1,81313592E+00
B ₁	1,18019139E-02
B ₂	5,91363658E-02
B ₃	1,61218747E+02

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

Mechanical Properties	
Young's Modulus E (10 ⁹ N/m ²)	88,4
Rigidity Modulus G (10 ⁹ N/m ²)	35,5
Poisson's Ratio σ	0,247
Knoop Hardness Hk [Class]	570 6
Abrasion Aa	157
Photoelastic Constant β (nm/cm/10 ⁵ Pa)	2,85

Partial Dispersions	
$n_C - n_t$	0,016798
$n_C - n_{A'}$	0,007579
$n_d - n_C$	0,007030
$n_e - n_C$	0,012766
$n_g - n_d$	0,031970
$n_g - n_F$	0,014697
$n_h - n_g$	0,013136
$n_i - n_g$	
$n_{C'} - n_t$	0,017894
$n_e - n_{C'}$	0,011670
$n_F - n_e$	0,013024
$n_i - n_F$	

Relative Partial Dispersion	
$\theta_{C,t}$	0,6912
$\theta_{C,A'}$	0,3119
$\theta_{d,C}$	0,2893
$\theta_{e,C}$	0,5253
$\theta_{g,d}$	1,3155
$\theta_{g,F}$	0,6047
$\theta_{h,g}$	0,5405
$\theta_{i,g}$	
$\theta'_{C,t}$	0,7246
$\theta'_{e,C'}$	0,4726
$\theta'_{F,e}$	0,5274
$\theta'_{i,F'}$	

Deviation of Relative Dispersions	
$\Delta \theta_{C,t}$	0,0060
$\Delta \theta_{C,A'}$	0,0003
$\Delta \theta_{g,d}$	0,0121
$\Delta \theta_{g,F}$	0,0110
$\Delta \theta_{i,g}$	

Thermal Properties	
Strain Point STP (°C)	569
Annealing Point AP (°C)	597
Transformation Temperature Tg (°C)	622
Yield Point At (°C)	653
Softening Point SP (°C)	703
Expansion Coefficients (-30~+70°C)	82
α (10 ⁻⁷ /°C) (+100~+300°C)	96
Thermal Conductivity k (W/m·K)	1,02

Coloring			
λ_{80}	405	λ_5	360
λ_{70}			

Internal Transmittance			
$\lambda_{0.80}$	392	$\lambda_{0.05}$	366

CCI		
B	G	R
0,00	2,31	2,29

Internal Transmittance	
$\lambda(nm)$	τ 10mm
280	
290	
300	
310	
320	
330	
340	
350	
360	
370	0,19
380	0,56
390	0,78
400	0,88
420	0,952
440	0,971
460	0,978
480	0,982
500	0,987
550	0,994
600	0,994
650	0,991
700	0,993
800	0,998
900	0,999
1000	0,998
1200	0,998
1400	0,996
1600	0,995
1800	0,988
2000	0,981
2200	0,957
2400	0,941

Other Properties	
Density d	3,06

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