

Refractive Index	n_d	1,85478 1,854780	Abbe Number	ν_d	24,80	Dispersion	$n_F - n_C$	0,034469
Refractive Index	n_e	1,862904	Abbe Number	ν_e	24,61	Dispersion	$n_F - n_{C'}$	0,035057

Refractive Indices		
$\lambda(\mu m)$		
n_{2325}	2.32542	1,79234
n_{1970}	1.97009	1,79974
n_{1530}	1.52958	1,80847
n_{1129}	1.12864	1,81792
n_t	1.01398	1,82165
n_s	0.85211	1,82889
$n_{A'}$	0.76819	1,83429
n_r	0.70652	1,83949
n_C	0.65627	1,84488
$n_{C'}$	0.64385	1,84642
n_{He-Ne}	0.6328	1,84787
n_D	0.58929	1,85448
n_d	0.58756	1,85478
n_e	0.54607	1,86290
n_F	0.48613	1,87935
$n_{F'}$	0.47999	1,88147
n_{He-Cd}	0.44157	1,89755
n_g	0.435835	1,90045
n_h	0.404656	1,91944
n_i	0.365015	

Constants of Dispersion Formula	
A ₁	1,85191438E+00
A ₂	4,31102852E-01
A ₃	3,45278284E+00
B ₁	1,32732620E-02
B ₂	5,85944644E-02
B ₃	2,39357089E+02

Chemical Properties	
Water Resistance (Powder) Group RW(P)	1
Acid Resistance (Powder) Group RA(P)	1
Weathering Resistance (Surface) Group	3
Acid Resistance (Surface) Group SR	1.0
Phosphate Resistance PR	1.0

Mechanical Properties	
Young's Modulus E (10 ⁹ N/m ²)	106,7
Rigidity Modulus G (10 ⁹ N/m ²)	42,7
Poisson's Ratio σ	0,249
Knoop Hardness Hk [Class]	600 6
Abrasion Aa	138
Photoelastic Constant β (nm/cm/10 ⁵ Pa)	3,35

Partial Dispersions	
$n_C - n_t$	0,023230
$n_C - n_{A'}$	0,010586
$n_d - n_C$	0,009904
$n_e - n_C$	0,018028
$n_g - n_d$	0,045668
$n_g - n_F$	0,021103
$n_h - n_g$	0,018989
$n_i - n_g$	
$n_{C'} - n_t$	0,024770
$n_e - n_{C'}$	0,016488
$n_F - n_e$	0,018569
$n_i - n_F$	

Relative Partial Dispersion	
$\theta_{C,t}$	0,6739
$\theta_{C,A'}$	0,3071
$\theta_{d,C}$	0,2873
$\theta_{e,C}$	0,5230
$\theta_{g,d}$	1,3249
$\theta_{g,F}$	0,6122
$\theta_{h,g}$	0,5509
$\theta_{i,g}$	
$\theta'_{C,t}$	0,7066
$\theta'_{e,C'}$	0,4703
$\theta'_{F,e}$	0,5297
$\theta'_{i,F'}$	

Deviation of Relative Dispersions	
$\Delta \theta_{C,t}$	0,0109
$\Delta \theta_{C,A'}$	0,0012
$\Delta \theta_{g,d}$	0,0117
$\Delta \theta_{g,F}$	0,0109
$\Delta \theta_{i,g}$	

Thermal Properties	
Strain Point STP (°C)	-
Annealing Point AP (°C)	-
Transformation Temperature Tg (°C)	578
Yield Point At (°C)	612
Softening Point SP (°C)	-
Expansion Coefficients (-30~+70°C)	77
α (10 ⁻⁷ /°C) (+100~+300°C)	94
Thermal Conductivity k (W/m·K)	1,12

Coloring			
λ_{80}		λ_5	360
λ_{70}	395		

Internal Transmittance			
$\lambda_{0.80}$	389	$\lambda_{0.05}$	358

CCI		
B	G	R
0,00	2,57	2,76

Internal Transmittance	
$\lambda(nm)$	τ 10mm
280	
290	
300	
310	
320	
330	
340	
350	
360	0,11
370	0,44
380	0,69
390	0,81
400	0,87
420	0,933
440	0,958
460	0,970
480	0,978
500	0,983
550	0,993
600	0,996
650	0,996
700	0,997
800	0,999
900	0,999
1000	0,999
1200	0,999
1400	0,999
1600	0,997
1800	0,993
2000	0,991
2200	0,977
2400	0,966

Other Properties	
Density d	3,49

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