

Refractive Index	n_d	1,52249 1,522494	Abbe Number	ν_d	59,84	Dispersion	$n_F - n_C$	0,008732
Refractive Index	n_e	1,524576	Abbe Number	ν_e	59,58	Dispersion	$n_F - n_{C'}$	0,008805

Refractive Indices		
$\lambda(\mu m)$		
n_{2325}	2.32542	1,49592
n_{1970}	1.97009	1,50104
n_{1530}	1.52958	1,50646
n_{1129}	1.12864	1,51108
n_t	1.01398	1,51256
n_s	0.85211	1,51509
$n_{A'}$	0.76819	1,51678
n_r	0.70652	1,51831
n_C	0.65627	1,51983
$n_{C'}$	0.64385	1,52026
n_{He-Ne}	0.6328	1,52065
n_D	0.58929	1,52242
n_d	0.58756	1,52249
n_e	0.54607	1,52458
n_F	0.48613	1,52857
$n_{F'}$	0.47999	1,52906
n_{He-Cd}	0.44157	1,53269
n_g	0.435835	1,53332
n_h	0.404656	1,53727
n_i	0.365015	1,54403

Constants of Dispersion Formula	
A ₁	1,04574577E+00
A ₂	2,39613026E-01
A ₃	1,15906850E+00
B ₁	5,85232280E-03
B ₂	2,36858752E-02
B ₃	1,31329061E+02

Chemical Properties	
Water Resistance (Powder) Group RW(P)	3
Acid Resistance (Powder) Group RA(P)	1
Weathering Resistance (Surface) Group	1~2
Acid Resistance (Surface) Group SR	1.0
Phosphate Resistance PR	1.0

Mechanical Properties	
Young's Modulus E (10 ⁹ N/m ²)	691
Rigidity Modulus G (10 ⁹ N/m ²)	303
Poisson's Ratio σ	0,140
Knoop Hardness Hk [Class]	540 5
Abrasion Aa	114
Photoelastic Constant β (nm/cm/10 ⁵ Pa)	2,67

Partial Dispersions	
$n_C - n_t$	0,007270
$n_C - n_{A'}$	0,003054
$n_d - n_C$	0,002660
$n_e - n_C$	0,004742
$n_g - n_d$	0,010822
$n_g - n_F$	0,004750
$n_h - n_g$	0,003952
$n_i - n_g$	0,010715
$n_{C'} - n_t$	0,007694
$n_e - n_{C'}$	0,004318
$n_{F'} - n_e$	0,004487
$n_i - n_{F'}$	0,014968

Relative Partial Dispersion	
$\theta_{C,t}$	0,8326
$\theta_{C,A'}$	0,3497
$\theta_{d,C}$	0,3046
$\theta_{e,C}$	0,5431
$\theta_{g,d}$	1,2393
$\theta_{g,F}$	0,5440
$\theta_{h,g}$	0,4526
$\theta_{i,g}$	1,2271
$\theta'_{C,t}$	0,8738
$\theta'_{e,C'}$	0,4904
$\theta'_{F',e}$	0,5096
$\theta'_{i,F'}$	1,6999

Deviation of Relative Dispersions	
$\Delta \theta_{C,t}$	0,0052
$\Delta \theta_{C,A'}$	0,0013
$\Delta \theta_{g,d}$	-0,0011
$\Delta \theta_{g,F}$	-0,0007
$\Delta \theta_{i,g}$	0,0032

Thermal Properties	
Strain Point STP (°C)	502
Annealing Point AP (°C)	536
Transformation Temperature Tg (°C)	548
Yield Point At (°C)	596
Softening Point SP (°C)	700
Expansion Coefficients (-30~+70°C)	82
α (10 ⁻⁷ /°C) (+100~+300°C)	95
Thermal Conductivity k (W/m·K)	1,06

Coloring			
λ_{80}	345	λ_5	320
λ_{70}			

Internal Transmittance			
$\lambda_{0.80}$	347	$\lambda_{0.05}$	320

CCI		
B	G	R
0,00	0,11	0,08

Internal Transmittance	
$\lambda(nm)$	τ 10mm
280	
290	
300	
310	
320	0,04
330	0,32
340	0,67
350	0,86
360	0,941
370	0,972
380	0,984
390	0,992
400	0,995
420	0,996
440	0,996
460	0,996
480	0,997
500	0,998
550	0,998
600	0,998
650	0,997
700	0,998
800	0,998
900	0,998
1000	0,998
1200	0,997
1400	0,988
1600	0,992
1800	0,972
2000	0,939
2200	0,86
2400	0,81

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

Other Properties	
Bubble Quality Group B	
Density d	2,49
Remarks	