

Refractive Index	n_d	1,72000 1,720000	Abbe Number	ν_d	43,69	Dispersion	$n_F - n_C$	0,016480
Refractive Index	n_e	1,723914	Abbe Number	ν_e	43,40	Dispersion	$n_F - n_{C'}$	0,016679

Refractive Indices		
$\lambda(\mu m)$		
n_{2325}	2.32542	1,68281
n_{1970}	1.97009	1,68840
n_{1530}	1.52958	1,69463
n_{1129}	1.12864	1,70065
n_t	1.01398	1,70282
n_s	0.85211	1,70683
$n_{A'}$	0.76819	1,70969
n_r	0.70652	1,71238
n_C	0.65627	1,71511
$n_{C'}$	0.64385	1,71588
n_{He-Ne}	0.6328	1,71660
n_D	0.58929	1,71986
n_d	0.58756	1,72000
n_e	0.54607	1,72391
n_F	0.48613	1,73159
$n_{F'}$	0.47999	1,73256
n_{He-Cd}	0.44157	1,73972
n_g	0.435835	1,74098
n_h	0.404656	1,74901
n_i	0.365015	1,76328

Constants of Dispersion Formula	
A ₁	1,73442942E+00
A ₂	1,51553910E-01
A ₃	1,46225433E+00
B ₁	1,00690928E-02
B ₂	4,70634701E-02
B ₃	1,40084396E+02

Chemical Properties	
Water Resistance (Powder) Group RW(P)	1
Acid Resistance (Powder) Group RA(P)	4
Weathering Resistance (Surface) Group	2
Acid Resistance (Surface) Group SR	51.2
Phosphate Resistance PR	1.2

Mechanical Properties	
Young's Modulus E (10 ⁹ N/m ²)	957
Rigidity Modulus G (10 ⁹ N/m ²)	374
Poisson's Ratio σ	0,278
Knoop Hardness Hk [Class]	530 5
Abrasion Aa	160
Photoelastic Constant β (nm/cm/10 ⁵ Pa)	1,53

Partial Dispersions	
$n_C - n_t$	0,012285
$n_C - n_{A'}$	0,005415
$n_d - n_C$	0,004895
$n_e - n_C$	0,008809
$n_g - n_d$	0,020977
$n_g - n_F$	0,009392
$n_h - n_g$	0,008035
$n_i - n_g$	0,022303
$n_{C'} - n_t$	0,013056
$n_e - n_{C'}$	0,008038
$n_F - n_e$	0,008641
$n_i - n_F$	0,030725

Relative Partial Dispersion	
$\theta_{C,t}$	0,7454
$\theta_{C,A'}$	0,3286
$\theta_{d,C}$	0,2970
$\theta_{e,C}$	0,5345
$\theta_{g,d}$	1,2729
$\theta_{g,F}$	0,5699
$\theta_{h,g}$	0,4876
$\theta_{i,g}$	1,3533
$\theta'_{C,t}$	0,7828
$\theta'_{e,C'}$	0,4819
$\theta'_{F,e}$	0,5181
$\theta'_{i,F'}$	1,8421

Deviation of Relative Dispersions	
$\Delta \theta_{C,t}$	-0,0063
$\Delta \theta_{C,A'}$	-0,0002
$\Delta \theta_{g,d}$	-0,0011
$\Delta \theta_{g,F}$	-0,0009
$\Delta \theta_{i,g}$	-0,0059

Thermal Properties	
Strain Point STP (°C)	604
Annealing Point AP (°C)	632
Transformation Temperature Tg (°C)	644
Yield Point At (°C)	685
Softening Point SP (°C)	743
Expansion Coefficients (-30~+70°C)	77
α (10 ⁻⁷ /°C) (+100~+300°C)	88
Thermal Conductivity k (W/m·K)	0,801

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

Coloring			
λ_{80}	400	λ_5	345
λ_{70}			

Internal Transmittance			
$\lambda_{0.80}$	380	$\lambda_{0.05}$	348

CCI		
B	G	R
0,00	1,40	1,41

Internal Transmittance	
$\lambda(nm)$	τ 10mm
280	
290	
300	
310	
320	
330	
340	
350	0,10
360	0,39
370	0,65
380	0,80
390	0,88
400	0,930
420	0,965
440	0,977
460	0,984
480	0,988
500	0,992
550	0,996
600	0,996
650	0,995
700	0,997
800	0,998
900	0,997
1000	0,997
1200	0,998
1400	0,997
1600	0,996
1800	0,990
2000	0,979
2200	0,947
2400	0,85

Other Properties	
Bubble Quality Group B	
Density d	3,95
Remarks	