

Refractive Index n_d	2,00100	Abbe Number ν_d	29,14	Dispersion n_F-n_C	0,034352
	2,001000				
Refractive Index n_e	2,009118	Abbe Number ν_e	28,92	Dispersion $n_F-n_{C'}$	0,034895

Refractive Indices		
$\lambda(\mu m)$		
n_{2325}	2.32542	1,93863
n_{1970}	1.97009	1,94585
n_{1530}	1.52958	1,95440
n_{1129}	1.12864	1,96380
n_t	1.01398	1,96756
n_s	0.85211	1,97488
$n_{A'}$	0.76819	1,98035
n_r	0.70652	1,98561
n_C	0.65627	1,99105
$n_{C'}$	0.64385	1,99260
n_{He-Ne}	0.6328	1,99406
n_D	0.58929	2,00070
n_d	0.58756	2,00100
n_e	0.54607	2,00912
n_F	0.48613	2,02540
$n_{F'}$	0.47999	2,02749
n_{He-Cd}	0.44157	2,04319
n_g	0.435835	2,04600
n_h	0.404656	2,06424
n_i	0.365015	

Constants of Dispersion Formula	
A ₁	2,39140662E+00
A ₂	4,39219228E-01
A ₃	2,38358467E+00
B ₁	1,31467500E-02
B ₂	5,53226042E-02
B ₃	1,61259900E+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	2.0
Phosphate Resistance PR	1.0

Mechanical Properties	
Young's Modulus E (10 ⁹ N/m ²)	1313
Rigidity Modulus G (10 ⁹ N/m ²)	502
Poisson's Ratio σ	0,307
Knoop Hardness Hk [Class]	650 7
Abrasion Aa	61
Photoelastic Constant β (nm/cm/10 ⁹ Pa)	0,76

Partial Dispersions	
n_C-n_t	0,023490
$n_C-n_{A'}$	0,010695
n_d-n_C	0,009952
n_e-n_C	0,018070
n_g-n_d	0,045001
$n_g-n_{F'}$	0,020601
n_h-n_g	0,018235
n_i-n_g	
$n_{C'}-n_t$	0,025041
$n_{e'}-n_{C'}$	0,016519
$n_{F'}-n_e$	0,018376
$n_i-n_{F'}$	

Relative Partial Dispersion	
$\theta_{C,t}$	0,6838
$\theta_{C,A'}$	0,3113
$\theta_{d,C}$	0,2897
$\theta_{e,C}$	0,5260
$\theta_{g,d}$	1,3100
$\theta_{g,F}$	0,5997
$\theta_{h,g}$	0,5308
$\theta_{i,g}$	
$\theta'_{C,t}$	0,7176
$\theta'_{e,C'}$	0,4734
$\theta'_{F,e}$	0,5266
$\theta'_{i,F'}$	

Deviation of Relative Dispersions	
$\Delta \theta_{C,t}$	0,0004
$\Delta \theta_{C,A'}$	0,0001
$\Delta \theta_{g,d}$	0,0058
$\Delta \theta_{g,F}$	0,0054
$\Delta \theta_{i,g}$	

Thermal Properties	
Strain Point STP (°C)	682
Annealing Point AP (°C)	718
Transformation Temperature Tg (°C)	725
Yield Point At (°C)	761
Softening Point SP (°C)	792
Expansion Coefficients (-30~+70°C)	75
α (10 ⁻⁷ /°C) (+100~+300°C)	88
Thermal Conductivity k (W/m·K)	0,944

Coloring			
λ_{80}		λ_5	360
λ_{70}	425		

Internal Transmittance			
$\lambda_{0.80}$	407	$\lambda_{0.05}$	360

CCI		
B	G	R
0,00	5,00	5,23

Internal Transmittance	
$\lambda(nm)$	τ 10mm
280	
290	
300	
310	
320	
330	
340	
350	
360	0,05
370	0,25
380	0,49
390	0,66
400	0,76
420	0,87
440	0,924
460	0,951
480	0,968
500	0,980
550	0,995
600	0,998
650	0,998
700	0,999
800	0,999
900	0,999
1000	0,999
1200	0,999
1400	0,999
1600	0,998
1800	0,995
2000	0,983
2200	0,964
2400	0,88

Other Properties	
Bubble Quality Group B	
Density d	5,02
Remarks	

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