

Refractive Index	$n_d$	<b>1,75500</b> 1,754999	Abbe Number	$\nu_d$	<b>52,32</b>	Dispersion	$n_F-n_C$	<b>0,014431</b>
Refractive Index	$n_e$	1,758437	Abbe Number	$\nu_e$	52,08	Dispersion	$n_F-n_{C'}$	0,014562

Refractive Indices		
$\lambda(\mu\text{m})$		
$n_{2325}$	2.32542	1,71387
$n_{1970}$	1.97009	1,72153
$n_{1530}$	1.52958	1,72961
$n_{1129}$	1.12864	1,73662
$n_t$	1.01398	1,73893
$n_s$	0.85211	1,74292
$n_{A'}$	0.76819	1,74565
$n_r$	0.70652	1,74814
$n_C$	0.65627	1,75062
$n_{C'}$	0.64385	1,75132
$n_{\text{He-Ne}}$	0.6328	1,75197
$n_D$	0.58929	1,75487
$n_d$	0.58756	1,75500
$n_e$	0.54607	1,75844
$n_F$	0.48613	1,76505
$n_{F'}$	0.47999	1,76588
$n_{\text{He-Cd}}$	0.44157	1,77191
$n_g$	0.435835	1,77296
$n_h$	0.404656	1,77954
$n_i$	0.365015	1,79083

Constants of Dispersion Formula	
A <sub>1</sub>	1,08280170E+00
A <sub>2</sub>	9,33988681E-01
A <sub>3</sub>	1,32367286E+00
B <sub>1</sub>	1,81156360E-02
B <sub>2</sub>	3,04157575E-03
B <sub>3</sub>	9,10353195E+01

Chemical Properties	
Water Resistance (Powder) Group RW(P)	1
Acid Resistance (Powder) Group RA(P)	4
Weathering Resistance (Surface) Group	1
Acid Resistance (Surface) Group SR	51.0
Phosphate Resistance PR	2.0

Mechanical Properties	
Young's Modulus E (10 <sup>9</sup> N/m <sup>2</sup> )	1222
Rigidity Modulus G (10 <sup>9</sup> N/m <sup>2</sup> )	473
Poisson's Ratio $\sigma$	0,291
Knoop Hardness Hk [Class]	720   7
Abrasion Aa	61
Photoelastic Constant $\beta$ (nm/cm/10 <sup>9</sup> Pa)	1,48

Partial Dispersions	
$n_C-n_t$	0,011699
$n_C-n_{A'}$	0,004976
$n_d-n_C$	0,004375
$n_e-n_C$	0,007813
$n_g-n_d$	0,017957
$n_g-n_F$	0,007901
$n_h-n_g$	0,006588
$n_i-n_g$	0,017871
$n_{C'}-n_t$	0,012394
$n_e-n_{C'}$	0,007118
$n_{F'}-n_e$	0,007444
$n_i-n_{F'}$	0,024946

Relative Partial Dispersion	
$\theta_{C,t}$	0,8107
$\theta_{C,A'}$	0,3448
$\theta_{d,C}$	0,3032
$\theta_{e,C}$	0,5414
$\theta_{g,d}$	1,2443
$\theta_{g,F}$	0,5475
$\theta_{h,g}$	0,4565
$\theta_{i,g}$	1,2384
$\theta'_{C,t}$	0,8511
$\theta'_{e,C'}$	0,4888
$\theta'_{F,e}$	0,5112
$\theta'_{i,F'}$	1,7131

Deviation of Relative Dispersions	
$\Delta \theta_{C,t}$	0,0185
$\Delta \theta_{C,A'}$	0,0055
$\Delta \theta_{g,d}$	-0,0118
$\Delta \theta_{g,F}$	-0,0093
$\Delta \theta_{i,g}$	-0,0485

Thermal Properties	
Strain Point StP (°C)	651
Annealing Point AP (°C)	670
Transformation Temperature Tg (°C)	700
Yield Point At (°C)	712
Softening Point SP (°C)	738
Expansion Coefficients (-30~+70°C)	58
$\alpha$ (10 <sup>-7</sup> /°C) (+100~+300°C)	70
Thermal Conductivity k (W/m·K)	0,842

Coloring			
$\lambda_{80}$	370	$\lambda_5$	280
$\lambda_{70}$			

Internal Transmittance			
$\lambda_{0.80}$	347	$\lambda_{0.05}$	282

CCI		
B	G	R
0,00	0,39	0,40

Internal Transmittance	
$\lambda(\text{nm})$	$\tau$ 10mm
280	0,03
290	0,12
300	0,21
310	0,24
320	0,47
330	0,61
340	0,73
350	0,82
360	0,88
370	0,930
380	0,956
390	0,972
400	0,980
420	0,988
440	0,991
460	0,994
480	0,996
500	0,997
550	0,998
600	0,998
650	0,998
700	0,998
800	0,998
900	0,998
1000	0,997
1200	0,997
1400	0,993
1600	0,993
1800	0,984
2000	0,958
2200	0,88
2400	0,62

Other Properties	
Bubble Quality Group B	
Density d	4,40
Remarks	

Temperature Coefficients of Refractive Index							
Range of Temperature (°C)	$dn/dT$ relative (10 <sup>-6</sup> /°C)						
	t	C'	He-Ne	D	e	F'	g
-40~-20		4,5		4,6	4,8	5,3	5,6
-20~0		4,5		4,7	4,9	5,3	5,7
0~20		4,6		4,8	5,0	5,4	5,9
20~40		4,7		4,9	5,1	5,6	6,1
40~60		4,9		5,1	5,4	5,8	6,3
60~80		5,1		5,4	5,6	6,0	6,6