

Refractive Index	$n_d$	<b>1,74950</b> 1,749505	Abbe Number	$\nu_d$	<b>35,33</b>	Dispersion	$n_F-n_C$	<b>0,021214</b>
Refractive Index	$n_e$	1,754531	Abbe Number	$\nu_e$	35,10	Dispersion	$n_F-n_{C'}$	0,021498

Refractive Indices		
$\lambda(\mu\text{m})$		
$n_{2325}$	2.32542	1,70260
$n_{1970}$	1.97009	1,70965
$n_{1530}$	1.52958	1,71748
$n_{1129}$	1.12864	1,72503
$n_t$	1.01398	1,72776
$n_s$	0.85211	1,73279
$n_{A'}$	0.76819	1,73640
$n_r$	0.70652	1,73980
$n_C$	0.65627	1,74326
$n_{C'}$	0.64385	1,74424
$n_{\text{He-Ne}}$	0.6328	1,74516
$n_D$	0.58929	1,74932
$n_d$	0.58756	1,74950
$n_e$	0.54607	1,75453
$n_F$	0.48613	1,76447
$n_{F'}$	0.47999	1,76574
$n_{\text{He-Cd}}$	0.44157	1,77515
$n_g$	0.435835	1,77681
$n_h$	0.404656	1,78753
$n_i$	0.365015	1,80695

Constants of Dispersion Formula	
A <sub>1</sub>	1,71203689E+00
A <sub>2</sub>	2,55989588E-01
A <sub>3</sub>	1,81456998E+00
B <sub>1</sub>	1,07724134E-02
B <sub>2</sub>	4,88593504E-02
B <sub>3</sub>	1,36359013E+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 <sup>9</sup> N/m <sup>2</sup> )	1097
Rigidity Modulus G (10 <sup>9</sup> N/m <sup>2</sup> )	438
Poisson's Ratio $\sigma$	0,253
Knoop Hardness Hk [Class]	610   6
Abrasion Aa	115
Photoelastic Constant $\beta$ (nm/cm/10 <sup>9</sup> Pa)	2,66

Partial Dispersions	
$n_C-n_t$	0,015503
$n_C-n_{A'}$	0,006860
$n_d-n_C$	0,006246
$n_e-n_C$	0,011272
$n_g-n_d$	0,027310
$n_g-n_F$	0,012342
$n_h-n_g$	0,010718
$n_i-n_g$	0,030139
$n_{C'}-n_t$	0,016484
$n_e-n_{C'}$	0,010291
$n_{F'}-n_e$	0,011207
$n_i-n_{F'}$	0,041216

Relative Partial Dispersion	
$\theta_{C,t}$	0,7308
$\theta_{C,A'}$	0,3234
$\theta_{d,C}$	0,2944
$\theta_{e,C}$	0,5313
$\theta_{g,d}$	1,2874
$\theta_{g,F}$	0,5818
$\theta_{h,g}$	0,5052
$\theta_{i,g}$	1,4207
$\theta'_{C,t}$	0,7668
$\theta'_{e,C'}$	0,4787
$\theta'_{F,e}$	0,5213
$\theta'_{i,F'}$	1,9172

Deviation of Relative Dispersions	
$\Delta \theta_{C,t}$	0,0184
$\Delta \theta_{C,A'}$	0,0047
$\Delta \theta_{g,d}$	-0,0039
$\Delta \theta_{g,F}$	-0,0025
$\Delta \theta_{i,g}$	-0,0085

Thermal Properties	
Strain Point STP (°C)	500
Annealing Point AP (°C)	521
Transformation Temperature Tg (°C)	535
Yield Point At (°C)	578
Softening Point SP (°C)	631
Expansion Coefficients (-30~+70°C)	73
$\alpha$ (10 <sup>-7</sup> /°C) (+100~+300°C)	92
Thermal Conductivity k (W/m·K)	1,12

Coloring			
$\lambda_{80}$	400	$\lambda_5$	330
$\lambda_{70}$			

Internal Transmittance			
$\lambda_{0.80}$	370	$\lambda_{0.05}$	331

CCI		
B	G	R
0,00	1,22	1,30

Internal Transmittance	
$\lambda(\text{nm})$	$\tau$ 10mm
280	
290	
300	
310	
320	
330	0,02
340	0,22
350	0,49
360	0,68
370	0,80
380	0,87
390	0,918
400	0,943
420	0,967
440	0,976
460	0,982
480	0,987
500	0,991
550	0,997
600	0,997
650	0,998
700	0,998
800	0,999
900	0,998
1000	0,998
1200	0,998
1400	0,995
1600	0,994
1800	0,989
2000	0,980
2200	0,945
2400	0,87

Other Properties	
Bubble Quality Group B	
Density d	3,29
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	4,1	4,9	4,9	5,2	5,5	6,3	7,1
-20~0	4,1	4,9	5,0	5,2	5,6	6,4	7,3
0~20	4,1	4,9	5,0	5,3	5,6	6,5	7,5
20~40	4,1	5,0	5,0	5,3	5,7	6,6	7,6
40~60	4,1	5,0	5,1	5,4	5,8	6,7	7,8
60~80	4,1	5,1	5,1	5,4	5,9	6,9	8,0