

Refractive Index n_D	1.90135	Abbe Number V_D	31.5	Dispersion $n_F - n_C$	0.02857
	1.901355		31.55		0.028569
Refractive Index n_e	1.908110	Abbe Number V_e	31.31	Dispersion $n_F - n_C$	0.029000

Refractive Indices		
	λ (μm)	
n_{2250}	2.32542	1.84397
n_{1970}	1.97000	1.85175
n_{1500}	1.52958	1.86059
n_{1200}	1.12664	1.86956
n_D	1.01396	1.87294
n_s	0.85211	1.87933
n_A	0.76819	1.88401
n_r	0.70652	1.88846
n_C	0.65627	1.89303
$n_{C'}$	0.64385	1.89433
n_{He-Ne}	0.6328	1.89556
n_D	0.58929	1.90111
n_d	0.58756	1.90135
n_e	0.54607	1.90811
n_F	0.48613	1.92160
n_F'	0.47999	1.92333
n_{He-Cd}	0.44157	1.93629
n_g	0.435835	1.93859
n_h	0.404656	1.95358
n_i	0.365015	

Deviation of Relative Partial Dispersions of Ince "Normal"	
$\Delta\theta_{C,i}$	0.0088
$\Delta\theta_{C,w}$	0.0017
$\Delta\theta_{g,d}$	0.0042
$\Delta\theta_{g,f}$	0.0042
$\Delta\theta_{h,g}$	

Constants of Dispersion Formula	
A_1	2.08122728
A_2	$3.98632407 \cdot 10^{-1}$
A_3	2.21679491
B_1	$1.11906410 \cdot 10^{-4}$
B_2	$5.21753272 \cdot 10^{-6}$
B_3	$1.41893166 \cdot 10^{-8}$

Other Properties		
Resin Quality Group	B	1
Specific Gravity	d	4.48
Price Ratio		
Remarks		

Temperature Coefficients of Refractive Index							
Range of Temperature (°C)	dn/dt relative (1/°C)						
	t	C'	He-Ne	D	e	F'	g
-40 ~ -20	4.6	5.5	5.6	5.9	6.4	7.5	8.7
-20 ~ 0	4.8	5.7	5.8	6.1	6.8	7.8	9.1
0 ~ 20	4.9	5.9	6.0	6.3	6.8	8.1	9.5
20 ~ 40	5.0	6.1	6.1	6.5	7.1	8.4	9.8
40 ~ 60	5.2	6.2	6.3	6.7	7.3	8.7	10.2
60 ~ 80	5.3	6.4	6.5	6.9	7.5	9.0	10.6

Partial Dispersions	
$n_C - n_D$	0.020097
$n_C - n_A$	0.009023
$n_A - n_D$	0.009321
$n_e - n_D$	0.015076
$n_g - n_C$	0.037236
$n_g - n_F$	0.016988
$n_h - n_g$	0.014965
$n_i - n_g$	
$n_C - n_r$	0.021397
$n_e - n_C$	0.013776
$n_F - n_g$	0.015224
$n_i - n_F$	

Thermal Properties		
Soft Point (°C)	SIP	617
Annealing Point (°C)	AP	638
Transition Temperature (°C)	Tg	658
Yield Point (°C)	At	687
Gelation Point (°C)	SP	722
Expansion Coefficients (1/°C)		
(30 ~ +20°C)		60
(+100 ~ +300°C)		74
Thermal Conductivity (W/mK)	k	0.931

Mechanical Properties		
Rough Modulus (10 ¹⁰ dyn/cm ²)	E	1232
Rigid Modulus (10 ¹⁰ dyn/cm ²)	G	478
Poisson's Ratio	σ	0.294
Knoop Hardness	Hk	680[7]
Abrasion	Aa	63
Procedural Constant (invol%/°C)	β	1.64

Chemical Properties		
Acid Resistance (Powdered Group)	RW(P)	1
Acid Resistance (Powdered Group)	RA(P)	1
Weathering Resistance (Surface Group)	W(S)	2
Alkali Resistance (Surface Group)	SR	3.0
Phosphate Resistance	PR	1.0

Relative Partial Dispersions	
$\theta_{C,i}$	0.7035
$\theta_{C,w}$	0.3158
$\theta_{g,d}$	0.2913
$\theta_{w,c}$	0.5277
$\theta_{g,d}$	1.3034
$\theta_{g,f}$	0.5948
$\theta_{h,g}$	0.5238
$\theta_{i,g}$	
$\theta_{C,i}$	0.7378
$\theta_{e,c}$	0.4750
$\theta_{F,e}$	0.5250
$\theta_{i,F}$	

Coloring	
λ_{60} / λ_5	40 / 38

Internal Transmittance		
λ (nm)	t (mm)	
260		
290		
300		
310		
320		
330		
340		
350		
360	0.010	
370	0.250	
380	0.580	
390	0.760	
400	0.850	
420	0.927	
440	0.955	
460	0.967	
480	0.976	
500	0.983	
550	0.992	
600	0.996	
650	0.997	
700	0.997	
800	0.998	
900	0.998	
1000	0.998	
1200	0.999	
1400	0.997	
1600	0.997	
1800	0.992	
2000	0.976	
2200	0.935	
2400	0.780	