Cargille Laboratories
55 Commerce Rd - Cedar Grove, NJ 07009-1289
Phone : 973-239-6633 - Fax : 973-239-6096 - Web : www.cargille.com

Typical Characteristics

Refractive Index Liquid	**Series AA**					
Refractive Index	**1.40000**	at	5893 Å	and	25	° C

Compostition	Siloxane and Aliphatic / Alicyclic Hydrocarbons
Appearance	Colorless Liquid
Odor	None
Color Stability	In sun: no visible change after 10 years
Index Change Rate	Very Low : 0.00000 to +0.00001
by Evaporation	expected after 32 days with exposed surface area to volume ratio of 0.2 cm^2/cc @ 25 °C

Pour Point	< -7	°C
Boiling Point	> 200	°C (760 mm Hg)
Flash Point	> 138	°C (COC)
Density	0.930	g / cc at 25 °C
Density Temp Coef	-0.0010	g / cc / °C
Coef of Thermal Expansion	0.0010	cc / cc / °C
Thermal Conductivity	0.0003	cal / sec / cm^2 / °C - 1 cm thickness
Viscosity	10	cSt at 25 °C
Surface Tension	19	dynes/cm at 25 °C

Soluble	Carbon Tetrachloride, Ethyl Ether, Heptane, Methylene Chloride, Naphtha, Toluene, Turpentine, Xylene
Partly Soluble	Acetone
Insoluble	Ethanol, Water

Compatible	1 Month Immersion at 25 °C : Acrylic, Cellulose Acetate, Epoxy, Mylar, Nylon, Polycarbonate, Polyester, Polyethylene, Polypropylene, Polystyrene, Polyurethane, Polyvinyl Chloride, Phenolic, Teflon, Neoprene and Fluorosilicone (Silastic 730 RTV) Rubbers ; Tygon F-4040-A, Tygothane, Aluminum, Brass, Copper, Steel
Incompatible	Latex, Silicone (Sylgard 184 and 3140 RTV) Rubber, Tygon S-50-HL, R-3603, B-44-3

Toxicity	Low (Request MSDS)

Refractive Index Liquid **Series AA**
Refractive Index **1.40000** at 5893 Å and 25 ° C

Cauchy Coefficients	A	B	C
	1.3878691	434089	-4.450197E+11

Cauchy Formula $A + B / \lambda^2 + C / \lambda^4$ (λ = Wavelength in Angstroms)

		Transmittance			
Wavelength (in Å)	Refractive Index	0.1 mm	1 mm	1 cm	10 cm
2250	1.46	98	79	9	0
2400	1.45	99	91	40	0
2480	1.45	99	92	41	0
2700	1.439	99	95	60	1
2900	1.433	100	98	78	8
3080	1.429	100	99	91	38
3370	1.423	100	100	99	90
3650	1.4179	100	100	100	99
4047	1.4127	100	100	100	99
4861	1.4054	100	100	100	99
5461	1.4019	100	100	100	99
5893	1.4000	100	100	100	99
6328	1.3984	100	100	100	99
6563	1.3977	100	100	100	99
6943	1.3967	100	100	100	99
8400	1.3939	100	100	99	91
10648	1.3917	100	100	98	83
13000	1.390	100	100	96	66
15500	1.390	100	96	63	1
25000	-	-	-	-	-
37000	-	-	-	-	-

$(n_F - n_C)$	0.0077	
Abbe v_D	51.7	
Temp. Coefficient	-0.000412	dn_D/dt (15 - 35 °C)