



80 Cypress Street, Warwick, RI 02888 ♦ U.S.A.
401-941-3000 ♦ 800-272-7752 ♦ Fax: 1-401-941-0150
info@rbcepoxy.com ♦ www.rbcepoxy.com

♦ **TECHNICAL BULLETIN** ♦ **TECHNICAL BULLETIN** ♦ **TECHNICAL BULLETIN** ♦

EPOXY RESIN CLEAR #1000 LV-4

CLEAR-1000 LV-4 is a modified, low viscosity ultra-clear resin used in coating, adhesive and casting applications where a clear resin system is desirable. Depending on the hardener selected, CLEAR #1000 LV-4 resin can be cured at room temperature or at elevated temperatures to obtain specific properties.

HANDLING PROPERTIES:

Mixed Viscosity @ 25°C,cps	500
Shelf Life, (closed Container @ 25°C)	12 Months

PHYSICAL PROPERTIES (CURED):

Color	Clear
Specific Gravity @ 25°C	1.15
Hardness, Shore D	82
Linear Shrinkage, in./in.	0.008
Moisture Absorption 10 Days @ 25°C, %	0.26
Izod Impact Strength, ft. lbs./in. of notch	0.55
Tensile Strength @ 25°C, psi	10,800
Compressive Strength @ 25°C, psi	19,200

THERMAL PROPERTIES (CURED):

Thermal Conductivity, Cal/Sec/CM ² /°C/CM X 10 ⁻⁴	5.2
Thermal Stability, 1000 Hrs. @ 175°C, % Wt. Loss	0.45
Coefficient of Thermal Expansion, in./in./°C X 10 ⁻⁶	50
Heat Distortion temperature, °C	45
Operating Temperature Range, °C	-55 to 145

ELECTRICAL PROPERTIES (CURED):

Volume Resistivity @ 25°C, OHM-CM	6x10 ¹⁵
Dielectric Strength, Volts/Mil	475
Dielectric Constant @ 25°C, 100 KC	4.3
Dissipation Factor @ 25°C, 100 KC	0.030

The above properties are typical of a system cured with hardener #A-95

RECOMMENDED HARDENERS:

A-95	A low viscosity system with excellent air release primarily used for open mold castings. Can be ground and polished.
B- 31	A rigid, heat cure system with a long pot life, designed for small to large castings.
B-125	A rigid, faster setting version of B-31 with excellent air-release and hardness.

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MIXING INSTRUCTIONS: Weigh the desired amount of CLEAR-1000 LV-4 resin into a clean container and combine with recommended hardener in one of the ratios shown below.

Hardeners	Parts by wt. Pot Life per 100 pts. resin	100 grms. @ 25°C
A-95	50	25-35 mins.
B-31	50	2- 3 hrs.
B-125	45	1-2 hrs.

RECOMMENDED CURE SCHEDULE:

Hardener	Cure @ 25°C	Cure @ 65°C	Cure @ 100°C	Cure @ 130°C
A-95	12-18rs.	4 hrs.	2 hrs.	-
B-31	-.	1-2 hrs.	1 hr.	30-45 mins.
B-125	-	1 hr.	30-40 mins.	30 mins.