

Epoxy Transformer Potting Compound

Technical Bulletin # 3106

Product Description

INSULCAST LN 1-55 is a non-cracking epoxy compound that was specifically designed for large transformer potting applications. It displays excellent electrical properties over a wide range of temperatures. **INSULCAST LN 1-55** makes use of the latest polymer and filler technology.

Properties Uncured

	Part A	Part B	
COLOR, VISUAL:	Black	Neutral	
VISCOSITY @ 25°C, cps:	60,000	20,000	ASTM D 2393
VISCOSITY @ 60°C, cps:	10,000	7,000	ASTM D 2393
SPECIFIC GRAVITY:	1.51	1.57	
MIX RATIO (by wt.):	0.64:1		
MIXED VISCOSITY, cps: @ 60°C	10,000		ASTM D 2393
SHELF LIFE @ 25°C, months:	12		
POT LIFE @ 25°C, hours	4-6		

Properties Cured

PHYSICAL

HARDNESS, DUROMETER (Shore D):	80	ASTM D 2240
COEFFICIENT OF THERMAL EXPANSION, °C:	28 x 10 ⁻⁶	
THERMAL CONDUCTIVITY, BTU-in/(ft ²)(hr)(°F):	4.5	
THERMAL CONDUCTIVITY, W/m °K:	0.648	
GLASS TRANSITION TEMPERATURE (T _g), °C	75 +/- 3	
SERVICE TEMPERATURE, °C:	-55 to +155	
FLAMMABILITY UL 94V0	Passes	

Electrical

DIELECTRIC STRENGTH, volts/mil:	400	ASTM D 149
DIELECTRIC CONSTANT, 1 KHz:	3.0	ASTM D 150
DISSIPATION FACTOR, 1 KHz:	0.01	ASTM D 150
VOLUME RESISTIVITY, ohm-cm:	6 x 10 ¹⁵	ASTM D 257

Use Instructions

1. Pre-heat both components to approximately 60°C, to lower viscosity for ease of mixing.
2. Pre-mix both components in their original containers to insure consistency.
3. Measure out (by weight) 0.64 parts of Insulcast LN 1-55 Part A for every 1 part of Insulcast LN 1-55 Part B.
4. Mix thoroughly, scraping the sides and bottom of container.
5. Evacuate @ 29 in. Hg for void-free casting.
6. Pour into unit or cavity.

Cure Schedule

8 hours @ 60C followed by 2 hours @ 110C

Storage Requirements

This product may settle upon shipment or storage. The product should be re-mixed well prior to use. Store material in a cool dry place.

Date 04/2010

IMPORTANT:

The following supersedes any provision in your company's forms, letters and papers. AMERICAN SAFETY TECHNOLOGIES makes NO WARRANTY, WHETHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE FOR THIS PRODUCT. No statements or recommendations contained in the product literature are to be construed as inducements to infringe any relevant patent, now or thereafter in existence. UNDER NO CIRCUMSTANCES SHALL AMERICAN SAFETY TECHNOLOGIES BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES FROM ALLEGED NEGLIGENCE, BREACH OF WARRANTY, STRICT LIABILITY OR ANY OTHER THEORY, ARISING OUT OF THE USE OR HANDLING OF THIS PRODUCT. The sole liability of AMERICAN SAFETY TECHNOLOGIES for any claims arising out of the manufacture, use or sale of its products shall be to refund the buyer's purchase price, provided such products have been demonstrated in AMERICAN SAFETY TECHNOLOGIES sole opinion, to justify such refund.

HEALTH CAUTION:

Avoid breathing possible fumes, mists and vapors which can cause severe respiratory damage. Use of NIOSH approved breathing apparatus is required for more than minimal exposure. Always work in areas with adequate ventilation to allow dissipation of polyamine and other chemical fumes, and where applicable, solvent fumes. Use of goggles, protective garments, rubber gloves, protective cream is required. If material gets into eyes, flush thoroughly with clean water for twenty (20) minutes; then seek medical treatment. Avoid skin contact. Material can cause contact dermatitis. Always wash exposed areas immediately, using warm water and soap, followed by rinsing with clean water. Observe all safety precautions. It is important when using solvent based materials or solvents to keep away from open flame or ignition source.

PLEASE REFER TO MATERIAL SAFETY DATA SHEET FOR FURTHER FIRST AID INFORMATION. FOR CHEMICAL EMERGENCY, CALL CHEMTREC (DAY OR NIGHT) 800 424-9300.