

# INSULCAST LN 1-05 EPOXY

## Crack Resistant Epoxy Potting and Encapsulation Compounds



**ITW INSULCAST LN 1-05** is a highly crack resistant epoxy compound specifically designed for large potting and encapsulation applications. It displays excellent electrical properties over a wide range of temperatures. INSULCAST LN 1-05 make use of the latest polymer and filler technology.

### Key Product Benefits LN 1-05

- Highly Crack Resistant
- Large Volume Single Pour Capability
- Low Exotherm
- Low Viscosity
- Room Temp Cure
- Meets UL 94V-0 Requirements
- Easily Machineable
- Long Pot Life
- Low CTE

For samples, technical advice or a distributor near you call:  
800.645.7546 or 215.855.8450. [www.insulcast.com](http://www.insulcast.com)

**INSULCAST**<sup>®</sup>  
ENCAPSULANTS, POTTING MATERIALS & SILICONE GREASES

**Epoxy Potting Compound**

Technical Bulletin # 3105

**Product Description**

**INSULCAST LN 1-05** is a non-cracking epoxy compound that was specifically designed for large potting and encapsulation applications. It displays excellent electrical properties over a wide range of temperatures. **INSULCAST LN 1-05** makes use of the latest polymer and filler technology.

**Properties Uncured**

	Part A	Part B	
COLOR, VISUAL:	Black	Neutral	
VISCOSITY @ 25°C, cps:	120,000	10	ASTM D 2393
SPECIFIC GRAVITY:	1.62	0.94	
MIX RATIO (by wt.):		7.2:1	
MIX RATIO (by volume)		4.15:1	
MIXED VISCOSITY, cps:	5,000		ASTM D 2393
SHELF LIFE @ 25°C, months:		12	
POT LIFE @ 25°C, hours		8-10	

**Properties Cured**

<u>PHYSICAL</u>		
HARDNESS, DUROMETER (Shore D):	85	ASTM D 2240
COEFFICIENT OF THERMAL EXPANSION, °C:	32 x 10 <sup>-6</sup>	
THERMAL CONDUCTIVITY, BTU-in/(ft <sup>2</sup> )(hr)(°F):	4.5	
THERMAL CONDUCTIVITY, W/m °K:	0.648	
GLASS TRANSITION TEMPERATURE (T <sub>g</sub> ), °C	75 +/- 3	
SERVICE TEMPERATURE, °C:	105	
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 <sup>15</sup>	ASTM D 257