

Technical Bulletin # 3066

Product Description

INSULGEL 90 is a room temperature curing, transparent, epoxy gel in which the gel number actually equals the hardness. **INSULGEL 90** is low viscosity and does not normally require vacuum de-gassing to void-free castings and imbedments.

Properties Uncured

	<u>PART A</u>	<u>PART B</u>	
COLOR, VISUAL:	Transparent	Amber	
VISCOSITY, cps:	300	100	ASTM D 2393
SPECIFIC GRAVITY:	1.05	0.96	
MIX RATIO (by weight):		100:25	
MIXED VISCOSITY, cps:		200	ASTM D 2393
POT LIFE @ 25°C, minutes:		60-90	
SHELF LIFE @ 25°C, months:		12	

Properties Cured

PHYSICAL

HARDNESS, DUROMETER (Shore A):	90	ASTM D 2240
TENSILE STRENGTH, psi:	1,000	ASTM D 638
TENSILE ELONGATION, %:	75	ASTM D 638
COEFFICIENT OF THERMAL EXPANSION, °C:	60×10^{-6}	
THERMAL CONDUCTIVITY, BTU-in/(ft ²)(hr)(°F):	1.6	
SERVICE TEMPERATURE, °C:	105	

Electrical

DIELECTRIC STRENGTH, volts/mil:	375	ASTM D 149
DISSIPATION FACTOR, 1 KHz:	0.02	ASTM D 150
DIELECTRIC CONSTANT, 1 KHz:	3.5	ASTM D 150
VOLUME RESISTIVITY, ohm-cm:	1×10^{14}	ASTM D 257

Mixing Instructions

1. Mix both parts prior to use.
2. Weigh out desired amount of Part A. Weigh into it 25 parts of Part B per 100 parts of Part A. Stir thoroughly, being sure to scrape sides and bottom of container.
3. Pour into mold or cavity.

Cure Schedule

Initial 6-8 hours at room temperature (25°C.) before handling. Shorter turnover times are possible at slightly elevated temperature.

Full cure at 25°C. - 72 hours.

Date

08/2006

IMPORTANT:

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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.