



TECHNICAL BULLETIN #3042 – INSULCAST 987 FILLED, SEMI-FLEXIBLE, POTTING COMPOUND

Revised: 05/2018

PRODUCT DESCRIPTION

INSULCAST 987 is a semi-flexible, potting compound that exhibits excellent electrical and physical properties over a wide range of temperatures.

PROPERTIES UNCURED

	PART A	PART B	
COLOR	Neutral	Neutral	-
VISCOSITY, cps 23°C	80,000	50,000	ASTM D 2393
SPECIFIC GRAVITY	1.41	1.37	-
MIX RATIO (by weight) A to B	2 to 3		-
MIXED VISCOSITY	60,000		ASTM D 2393
WORK LIFE @ 25°C, hours	>48		-
SHELF LIFE @ 25°C, months	12		-

PROPERTIES CURED

PHYSICAL		
HARDNESS, DUROMETER (Shore D)	65	ASTM D 2240
COEFFICIENT OF THERMAL EXPANSION, °C	45x10 ⁻⁶	-
THERMAL CONDUCTIVITY, BTU-in/(ft ²)(hr)(°F)	2.9	-
SERVICE TEMPERATURE, °C	-55 to 155	-

ELECTRICAL

DIELECTRIC STRENGTH, volts/mil	375	ASTM D 149
DIELECTRIC CONSTANT, 1 KHz	4.9	ASTM D 150
DISSIPATION FACTOR, 1 KHz	0.05	ASTM D 150
VOLUME RESISTIVITY, ohm-cm	1x10 ¹⁴	ASTM D 257

MIXING INSTRUCTIONS

1. Pre-mix both components in their original containers to insure consistency.
2. Pre-heat both components to 50°-60°C, to lower viscosity for ease of mixing.
3. Measure out 2 parts of Insulcast 987 Part A to 3 parts of Part B (by weight).
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

2 hours @ 120°C or 24 hours @ 75°C.

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.