



## TECHNICAL BULLETIN #3092 – INSULCAST RTVS 3-95-1 LOW VISCOSITY, HIGH THERMAL CONDUCTIVITY POTTING COMPOUND

Revised: 11/2019

### PRODUCT DESCRIPTION

**INSULCAST RTVS 3-95-1** is a low viscosity, thermally conductive RTV silicone compound, UL recognized under file E86165 for flame class 94V-0.

### PROPERTIES UNCURED

	Part A	Part B	
COLOR, VISUAL	Red	Clear	-
VISCOSITY@ 25°C, cps	15000	1000	ASTM D 2393
SPECIFIC GRAVITY	2.35	0.96	-
MIX RATIO (by wt.)	100:5		-
MIXED VISCOSITY, cps	10,000		ASTM D 2393
SHELF LIFE @ 25°C, months	12		-
POT LIFE (100 gr) @ 25°C, hours	1.5		-

## PROPERTIES CURED

PHYSICAL		
HARDNESS, DUROMETER (Shore A)	65	ASTM D 2240
TENSILE STRENGTH, psi	475	ASTM D 412
TENSILE ELONGATION, %	45	ASTM D 412
TEAR STRENGTH, Die B lb/in	15	ASTM D 624
COEFFICIENT OF THERMAL EXPANSION, °C	18.0x10 <sup>-5</sup>	-
THERMAL CONDUCTIVITY, W/m °K	1.25	-
SERVICE TEMPERATURE, °C	-55 to +260	-

## ELECTRICAL

DIELECTRIC STRENGTH, volts/mil	500	ASTM D 149
DIELECTRIC CONSTANT, 1 KHz	5.0	ASTM D 150
DISSIPATION FACTOR, 1 KHz	0.005	ASTM D 150
VOLUME RESISTIVITY, ohm-cm	5x10 <sup>14</sup>	ASTM D 257

## USE INSTRUCTIONS

1. Pre-mix Part A in original container before withdrawing any material.
2. Measure 5 parts of Part B for each 100 parts of Part A.
3. Mix thoroughly, scraping both the bottom and the sides of mixing container.
4. To ensure void-free castings, evacuate at 29" Hg for 3-4 minutes.
5. Pour into unit or mold.

## CURE SCHEDULE

Overnight at room temperature (24 hours) @25°C,  
**OR** 4 hours at 50°C,  
**OR** 1 hour at 90°C,  
**OR** 15 minutes at 125°C.

## 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.

## SPECIAL NOTES

Certain materials may inhibit the cure of **RTVS 3-95-1** when placed in contact with the mixed, uncured rubber. Materials such as amines and amine cured epoxies, sulfur containing materials and condensation (tin cured) silicones, are some which may cause inhibition. Even surfaces which have been in contact with such materials may cause it. If in doubt, a patch test should be done.

## IMPORTANT:

The following supersedes any provision in your company's forms, letters and papers. ITW PERFORMANCE POLYMERS 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 ITW PERFORMANCE POLYMERS 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 ITW PERFORMANCE POLYMERS 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 ITW PERFORMANCE POLYMERS 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.**

