

RTV Silicone Potting Compound

Technical Bulletin # 3133

Product Description

INSULCAST RTVS 3-95-2 is a very highly thermally conductive, high temperature RTV silicone compound which meets the flammability requirements of UL 94V-0.

Properties Uncured

| | Part A | Part B | |
|----------------------------------|---------------|---------------|-------------|
| COLOR, VISUAL: | Red | Neutral | |
| VISCOSITY @ 25°C, cps: | 35000 | 35000 | ASTM D 2393 |
| SPECIFIC GRAVITY: | 2.36 | 2.27 | |
| MIX RATIO (by weight or volume): | | 1:1 | |
| MIXED VISCOSITY, cps: | 35000 | | ASTM D 2393 |
| Gel Time, 25°C, hours | | 2-4 | |
| POT LIFE @25°C, hours | | 1.5 | |
| SHELF LIFE @25°C, months: | | 12 | |

Properties Cured

| PHYSICAL | | | |
|--|-------------|--|-------------|
| HARDNESS, DUROMETER (Shore A): | 85 | | ASTM D 2240 |
| TENSILE STRENGTH, psi: | 400 | | ASTM D 412 |
| TENSILE ELONGATION, %: | 17 | | ASTM D 412 |
| TEAR STRENGTH, Die B lb/in : | 5 | | ASTM D 624 |
| COEFFICIENT OF THERMAL EXPANSION, °C: | 15.0 x 10-5 | | |
| THERMAL CONDUCTIVITY, BTU-in/(ft ²)(hr)(°F): | 15 | | |
| THERMAL CONDUCTIVITY, BTU-ft/(ft ²)(hr)(°F): | 1.25 | | |
| THERMAL CONDUCTIVITY, W/m °K: | 2.16 | | |
| CAL-CM/(CM ²)(SEC)(°C): | 0.005 | | |
| 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: | 0.01 | | ASTM D 150 |
| VOLUME RESISTIVITY, @ 125 °C ohm-cm: | 1 x 10 ¹³ | | ASTM D 257 |
| VOLUME RESISTIVITY, @ 25 °C, ohm-cm: | 1 x 10 ¹⁴ | | ASTM D 257 |

Use Instructions

1. Pre-mix the Part A & Part B in their original containers.
2. Measure 100 parts of Part B for each 100 parts of Part A.
3. Blend A and B together thoroughly.
4. To ensure void-free castings, evacuate at 29" Hg for 3-4 minutes.
5. Pour into unit or mold.

Cure Schedule

24 hours @25°C,
OR 2-4 hours at 65°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 3-95-2 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.

Date 03/2011

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.