

Product Description

Vibra-Tite RTV Copper Silicone Gasket Maker is a one-part neutral cure sealant with high temperature resistance that cures in the presence of atmospheric moisture to produce a durable and flexible silicone rubber compound.

Vibra-Tite RTV Copper Silicone Gasket Maker creates a long-lasting flexible seal with excellent adhesion to most surfaces. This sealant is intended for a variety of general purpose and industrial applications and retains its elastomeric properties at temperatures from -65° to 700°F. (-53° to 370°C.).

Features

- Specially designed for automotive applications such as sealing exhaust manifolds; turbo housings; oxygen sensors; adhering auto and appliance trim; providing form-in-place gaskets for gear boxes, compressors & pumps; sealing trailers and truck cabs; bonding and sealing appliance parts.
- The consistency of Vibra-Tite RTV Copper Silicone Gasket Maker remains uniform over a wide range of temperatures. It may be applied in sub-zero weather without loss of extrusion or physical properties.
- Vibra-Tite RTV Copper Silicone Gasket Maker retains its elastomeric properties at temperatures from -65° to 700°F. and can be used for intermittent exposure at temperatures up to 700°F.

Limitations

Vibra-Tite RTV Copper Silicone Gasket Maker is not recommended for use in the following applications:

- Do not use silicone gasket maker when replacing head gaskets.
- Do not use on parts continuously immersed in gasoline.
- Glazing or edge sealing of insulated glass.
- Structural glazing.
- Aquariums
- Copper or brass. The cure byproduct may discolor these surfaces.
- Totally confined spaces. Because the sealant needs atmospheric moisture to cure.
- Surfaces that require painting. Paint will not adhere to most silicone surfaces.

Typical Properties

- Sag or Slump: Nil
- Specific Gravity: 1.03
- Tack-free time at 77°F, 50% RH: <1 hr.
- Curing time @77°F, 50% RH
 - 0.25 in. bead: 24 hrs.
- Durometer hardness Shore A: >26
- Meets: GM Specification 9985985

Physical Properties of Cured Material

Cured for 7 days @ 25 °C / 50±5 % RH

- Shore Hardness, ISO 868, Durometer A 23 - 38
- Elongation, ISO 37, % ≥350
- Tensile Strength, ISO 37 N/mm² ≥1.4 (205 psi)

Cured for 21 days @ 22 °C / 50±5 % RH

- Coefficient of Thermal Expansion, ISO 11359-1, K⁻¹ 340×10⁻⁶

Electrical Properties:

Volume Resistivity, IEC 60093, Ω·cm 5.5×10¹⁵

Surface Resistivity, IEC 60093, Ω 200×10¹⁵

TYPICAL PERFORMANCE OF CURED MATERIAL

Adhesive Properties

After 21 days @ 22 °C / 50% RH, and 0.5 mm gap

Lap Shear Strength, ISO 4587:

- Copper N/mm² 0.3(40psi)
- Brass N/mm² 0.1(15psi)
- Mild steel N/mm² 0.3(35psi)
- Mild steel^{GB} N/mm² 0.7(95psi)
- Aluminum N/mm² 0.3(35psi)
- Aluminum^{GB} N/mm² 0.6(90psi)
- Stainless steel N/mm² 0.3(35psi)
- ABS N/mm² 0.1(15psi)
- Silicone N/mm² 0.1(15psi)
- Phenolic N/mm² 1.0(145psi)
- Zn plated steel N/mm² 0.4(55psi)
- Steel (e-coated)N/mm² 1.3(185psi)



Directions For Use

1. Clean and dry surfaces. Surfaces should be free of dirt, grease, oil and old gasketing material.
2. Remove cap, puncture inner seal, screw on extension nozzle and cut nozzle to desired bead width.
3. Apply an approximate 1/8" unbroken bead to one surface, completely encircle all bolt holes.
4. Assemble parts while material is tacky (approx. 5 to 10 minutes). Do not over tighten bolts. Material skins within 15 minutes.
5. May be applied to both sides of gasket to use as a pre-cut gasket dressing.
6. Allow to cure for at least 15 minutes. Material normally fully cures in 24 hours.
7. Remove nozzle and replace cap after use.

Storage and Shelf Life

When stored in original, unopened containers at or below 90°F (32°C) Vibra-Tite RTV Copper Silicone Gasket Maker has a minimum shelf life of 12 months from the date of manufacture.