One-Part Condensation Cure: Acetoxy Cure Chemistry⁺

| | HIGH PERFORMANCE | | | | | | SPECIALTY | | GENERAL PURPOSE | |
|--|---|---|---|--|---|--|--|---|--|---|
| | | | | | HIGH STRENGTH | | | | | |
| | RTV100 Series | RTV106 | RTV112 RTV118 | RTV116 | RTV157 | RTV159 | FRV1106 | RTV1473 | IS800 Series ⁽¹⁾ | IS806 |
| Features | Paste adhesive with FDA, USDA, NSF. UL listed. MIL-A-46106B. | High temperature, paste adhesive compliant with FDA, USDA and NSF. UL listed. MIL-A-46106B. | Flowable adhesive compliant with FDA, USDA and NSF. UL listed. MIL-A-46106B. | High temperature, flowable adhesive compliant with FDA, USDA and NSF. UL listed. MIL-A-46106B. | High strength, paste adhesive. | High temperature, high strength, paste adhesive. | Fluorosilicone, paste adhesive. Excellent resistance to fuel, oil, moisture, UV, ozone and chemicals. | Oil-resistant, heavy-bodied, paste adhesive. | Paste adhesive with FDA, USDA, and NSF compliance. UL94 HB recognition. | High temperature, paste adhesive with FDA, USDA, and NSF compliance. UL94 HB recognition. |
| Typical Applications (include but not limited to) | Electrical insulation; Formed- in-place gaskets; Assembly applications; Sealing and bonding. | Sealing heating elements; Gasketing; Electrical insulation; Sealing and bonding. | Electrical insulation; Thin section potting; Self leveling protective coatings; Assembly applications. | Thin section potting; Self leveling protective coatings; Electrical insulation. | High voltage wire and cables; Valve sealants; Turbines; Fluid metering devices; Gaskets and sealing devices. | High voltage wire and cables; Valve sealants; Turbines; Fluid metering devices; Gaskets and sealing devices. | Formed-in-place gasketing; Sealing seams; Fuel handling systems; Sealing and bonding; Valve manufacturers. | Formed-in-place gasketing; Sealing and bonding. | Sealing and bonding. | Sealing and bonding. |
| Key Substrate Adhesion | Primerless adhesion to many metals, plastics and glass. | Primerless adhesion to many metals, plastics and glass. | Primerless adhesion to many metals, plastics and glass. | Primerless adhesion to many metals, plastics and glass. | Primerless adhesion to many metals, plastics and glass. | Primerless adhesion to many metals, plastics and glass. | Primerless adhesion to many metals, plastics and glass. | Primerless adhesion to many metals, plastics and glass. | Primerless adhesion to many metals, plastics and glass. | Primerless adhesion to many metals, plastics and glass. |
| Color (Final Product) | RTV102: White RTV103: Black RTV108: Translucent RTV109: Aluminum | Red | RTV112: White RTV118: Translucent | Red | Gray | Red | Red | Black | IS802: White IS803: Black IS808: Translucent IS800.09: Aluminum | Red |
| Viscosity (cps)/ Application Rate (g/min) | 400 g/min | 400 g/min | RTV112: 25,000 cps RTV118: 25,000 cps | 25,000 cps | 180 g/min | 180 g/min | 92 g/min | 375 g/min | 425 g/min | 550 g/min |
| Useful Temperature Range | -60 to 205°C (-75 to 400°F) | -60 to 260°C (-75 to 500°F) | -60 to 205°C (-75 to 400°F) | -60 to 260°C (-75 to 500°F) | -60 to 205°C (-75 to 400°F) | -60 to 260°C (-75 to 500°F) | -60 to 205°C (-75 to 400°F) | -60 to 205°C (-75 to 400°F) | -60 to 205°C (-75 to 400°F) | -60 to 260°C (-75 to 500°F) |
| Specific Gravity | 1.06 | 1.08 | 1.05 | 1.10 | 1.10 | 1.11 | 1.45 | 1.06 | 1.04 | 1.05 |
| Hardness, Shore A Durometer | 30 | 30 | 25 | 20 | 28 | 28 | 39 | 30 | 23 | 22 |
| Tensile Strength (psi) | 400 | 375 | 325 | 350 | 975 | 1025 | 485 | 450 | 300 | 250 |
| Elongation (%) | 450 | 400 | 325 | 350 | 825 | 825 | 200 | 500 | 450 | 425 |
| Dielectric Strength (75 mils, V/mil) | 500 | 500 | 400 | 400 | 525 | 500 | - | - | 500 | 500 |
| Dielectric Constant (60 Hz) | 2.80 | 2.80 | 2.80 | 2.80 | 2.90 | 2.60 | - | - | 2.90 | 2.90 |
| Linear Shrinkage (%) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | - | - | - | - |
| Processing: Tack Free Time | 20 minutes | 20 minutes | 20 minutes | 30 minutes | 45 minutes | 45 minutes | 20 minutes | 25 minutes | 30 minutes | 30 minutes |
| Cure Time @ 25°C (77°F)++ | 24 hours | 24 hours | 24 hours | 24 hours | 24 hours | 24 hours | 24 hours | 24 hours | 24 hours | 24 hours |

Note: Additional information may be available on the technical datasheet. This chart contains typical property values and actual values or results may vary.

⁺ These sealants are not for use in delicate electrical and electronic applications in which corrosion of copper, brass and other sensitive metals is undesirable.

⁺⁺ Cure times are typical values which may be affected by bead size, temperature, relative humidity, and the equipment used. Full property development with standard condensation cure products may take 3 to 7+ days (at 25°C and 50% RH).

⁽¹⁾ IS802 does not currently meet FDA regulation 21CFR177.2600 "Rubber Articles Intended for Repeated Use."