



## US-EC-81HF

### Conductive Silicone RTV Adhesive for EMI/RFI Silver Coated Aluminum Filler

US-EC-81HF is an electrically conductive moisture curing high flexibility silicone 1-part RTV adhesive rubber developed for emi/rfi applications requiring fast development of physical properties. When cured, the elastomer resists weathering, ozone, moisture, UV and high temperatures.

#### Product Features

- Fast Room Temperature cure
- Thixotropic paste
- Non-corrosive
- Temperature range -45°C to +260°C
- Conductive Filler: Silver Coated Aluminum
- Very high conductivity compared with Nickel Graphite

**Colors:** Silver-Tan

#### Typical Applications

- High Electrical Conductivity
- High Thermal Conductivity
- EMI-RFI Shielding
- Form in place gaskets

**Service temperature** -45°C to +260°C

#### Properties

**Uncured:** Viscosity, cps: 55,000  
 Specific Gravity: 1.86      Consistency: thixotropic paste  
 Working time, in minutes at Room Temperature: 15  
 Tack Free Time, in minutes at Room Temperature: 30  
 Application Rate: 90 PSI, in g/minute: >400 (3mm orifice at 0.6 MPa)

#### Cured 72 Hours at Room Temperature:

Durometer, Shore A: 60  
 Volume Resistivity; 0.01 Ohms-cm  
 Thermal Conductivity: 2.5 W/m/K

**Method of Application:** Dispense sealant onto part. Mate parts, ensuring not all of the product is squeezed out of flange assembly. Allow to cure.

**Chemical cure system:** Oxime cure system

**Solids:** 98% solids, contains no solvents

**Curing:** Typical utilization involves dispensing in open air and ambient humidity to result in a high strength adhesive rubber. Cure speed can be accelerated with increased humidity to very rapid cures exhibiting surprisingly fast adhesion.

**Adhesion:** Primerless adhesion to most plastics, metals and typical substrates.

**Limitations:** Allow to fully cure before putting assembly into service. Ensure enough product remains between flanges to be effective in an assembly.

**Packaging:** Available in standard 1 & 3 oz squeeze tubes and 10.3 oz. cartridges. Other packaging sizes on request.

**Handling and safety:** For maximum shelf life, keep containers sealed when not in use. Keep out of the reach of children. Uncured sealant irritates eyes and skin. Refer to MSDS.

**Shelf-life:** Sealed containers guaranteed for 6 months from the ship date when stored in a cool dry area below 70°F.