



## US-HC-453

### Heat Cure 1 Part Self Leveling Low Viscosity Silicone Adhesive Sealant

**US-HC-453** is a 1-part, heat cure silicone developed for conformal coating applications. It offers unprimed adhesion to metals and many plastics. Heated cures result in a tough and durable silicone conformal coating.

#### Product Features

- Neutral Addition Cure
- Fast heat cure
- Low Viscosity
- Fluoresces under UV light to enable coating inspection
- Adhesion to metals and many plastics
- Convenient 1 part system

#### Product Applications

- Coating electronic assemblies
- Industrial coating and sealing
- Thin section potting & encapsulation

**Chemical cure system:** Platinum catalyzed, addition cure system.

#### Typical Properties

##### Uncured

|                        |                     |                                     |
|------------------------|---------------------|-------------------------------------|
| Specific Gravity: 0.98 | Color: Clear        | Solids: 100 %                       |
| Shelf Life: 12 MONTHS  | Viscosity: 125 cps. | Tack Free Time at 110°C: 15 minutes |

##### Cured – 20 Minutes at 110°C

Durometer, Shore A: 10  
 Dielectric Strength kv/mm: 13  
 Dielectric Constant: 2.4  
 Dissipation Factor at 1kHz: 0.01  
 Thermal conductivity: 0.0005

**Application Methods:** Apply by: pouring, dipping, brushing, flow-coat, spin-on or spraying.

**Curing:** Can be accomplished with heat to very rapid cures. Typical utilization involves dispensing in open air and oven, IR, or hot air curing.

**Handling precautions:** Avoid contact with tin cured RTV's, sulphur compounds, azides, imides, latex rubber gloves, and amines as cure system can be deactivated

**Solids:** 100% solids, contains no solvents

**Adhesion:** This product offers primer-less adhesion to plastics, metals and typical substrates.

**Service temperature:** -65°C to +250°C continuous

**Limitations:** Do not use product in solvent or fuel immersion applications. Allow to fully cure before putting assembly into service.

**Packaging:** Available in 8 pound gallon cans, 40 lb. pails and 400 lb. drums. This product is also available in customer defined packaging upon 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.

**Applicable standards:** Conforms to GM low volatility requirements.