SC5000- POSS Silicone Coating

Extreme Adhesion- High Temp

PRODUCT DESCRIPTION

SC5000 is an optically clear two-part coating with outstanding adhesive properties and resistance to high tempertures, while still maintaining substantial flexibility and transparency. The material is extremely adhesive to metallic, glass, and plastic substrates. It can also be used for electronic components and solar cell panels.

KEY FEATURES

- High Temp Resistance
- Excellent Flexibility
- Extremely Adhesive
- Visually Transparent

PHYSICAL PROPERTIES

Density (after cure):

Pot life @ RT:

Viscosity (after mixing @25°C):

Appearance (post cure):

1.1 g/ml
Indefinite

~200 mPa s
Transparent/soft

Glass Transition: 53 °C

Storage Modulus: 123 MPa @25°C Elongation @ Break: 100-120 % Stress @ Break: 200-500 kPa Young's Modulus: 640-900 kPa

Shore A: 62

Temp.Stability: 96% mass retained @400°C (1hr)

Uncured Shelf Life: 1 year

RI: 1.466@19.7°C





The coating will ceramify at $T\sim 400^{\circ}C$ Storage modulus @ 350°C = 55 MPa

CURE PROCEDURE

SC5000 begins to cure at approximately 115°C. Heat coating in oven at 80°C for 1 hour to ensure removal of trapped air. Then, increase temperature to a minimum of 120°C for 4 hours for full cure.

*Fillers can be added to increase viscosity.

RECOMMENDED CURE PROCEDURE:

- 1) Clean the substrate.
- 2) Mix Part A (resin) to Part B (hardener) as directed.
- 3) Thoroughly stir the mixture.
- 4) Allow solution to rest at room temperature to release any trapped air (degas).
- 5) Apply the resin.
- 6) Follow cure procedure.
- 7) Slowly cool the parts down to room temperature prior to use.

WARRANTY

The information contained herein is believed to be accurate and reliable. However, the user is responsible for determining the suitability and use of the final formulations/products. Hybrid Plastics warrants that its products will meet specifications, but not merchantability or fitness for use.

Hybrid Plastics, Inc. - 55 W.L. Runnels Industrial Drive - Hattiesburg, MS 39401 - USA
Phone (601) 544-3466 - Fax (601) 545-3103
www.hybridplastics.com