

## Use of Stycast Epoxy 1266

### PRECAUTIONS

1. This product can cause eye irritation. Prevent eye contact through the use of chemical safety glasses, splash-proof chemical goggles, or face shield.
2. This product can cause skin irritation, or allergic skin reaction. Wear appropriate protective gloves.
3. Ventilation is required when using over 10 grams of stycast 1266.

### RECOMMENDED EQUIPMENT AND SUPPLIES

- Isopropyl Alcohol
- Plastic 50 ml Erlenmeyer flask with screw on cap
- B-D 1 cc syringe (tuberculin) without stainless steel needle, #309602
- B-D 10 cc or 20 cc syringe without stainless steel needle, #33500 or #33620
- Amber eye dropper bottle #240320
- Wide mouth Nalgene bottle #211780
- Ohans CT1200 model precision scale
- Baxter scientific products vortex mixer CAT.S8223-1
- Vacuum desiccator
- 1/2" sem-flex-needly lavender, #232749
- Safety glasses
- Clean room gloves
- Ventilation

### PROCEDURE

#### 1. Mix Part A and Part B

##### 1.1 Stycast 1266 mix ratio:

Property	Part A (Clear Resin)	Part B (Resin Hardener)
Mix Ratio by weight	100	28

1.2 Accurately weigh Part A and Part B into a clean flask container in the recommended ratio. Weighing apparatus should have an accuracy in proportion to the amount of epoxy to be used.

1.3 Place an Erlenmeyer flask on the scale and tare to zero. Use a 10 cc syringe to put 10 grams of the part A stycast material in the flask. (The resin is difficult to pull into the syringe.)

1.4 Use the dropper from the amber bottle to put 2.8 grams of the part B stycast in the flask. (This is not difficult as the viscosity is quite low.)

1.6 Place the cap on the flask. Hold the bottle onto the vortex mixer and shake it for approximately 2 minutes.

## **2. Degassing**

2.1 To ensure a void-free embedment, vacuum deairing should be used to remove any entrapped air introduced during the mixing operation.

2.2 Remove the cap from the flask and place the flask in the vacuum desiccator. Pump the desiccator to 3 torr (about 3 minutes). Foam will raise the liquid height several times then subside. Continue pumping until most of the bubbling has ceased. This step usually requires 5-10 minutes.

## **3. Application**

3.1 Make sure to clean the surface or cavity mold with Isopropyl Alcohol before applying the Stycast 1266 epoxy to any surface.

3.2 Use 1cc syringe to dispense the epoxy mixture onto a clean surface or pour mixture into cavity or mold. Warming of the mold or assembly reduces the viscosity improving the flow of material into unit having intricate shapes or tightly packed coils or components. For tightly packed coils or components use a Sem-flex-needle #232749 at the end of the 1cc syringe to dispense the epoxy.

3.3 Further vacuum degassing in the mold may be required for critical applications.

## **4. Curing**

4.1 Curing time is 8-16 hours at 25°C and 1-2 hours at 65°C. The recommended time is 24 hours at room temperature.