

# HI-POLY 139A/B Clear Epoxy Compound

## Product Information Sheet

For reference only, not for specification use

### DESCRIPTION:

A two-part clear/amber epoxy adhesive compound.

### USES:

It can be used as adhesive to bond various substrates, including, metal, plastic, glass, ceramic and stone.

### ADVANTAGES:

- Excellent adhesion
- Excellent chemical and water resistance

### PACKAGING:

Packaged in kits as pre-proportioned batches for error-free mixing and application.

### SURFACE PREPARATION:

In general, the surface to be bonded must be clean, sound, dry and above 10°C to assure an optimum bonding. All surface contaminants must first be thoroughly removed by chemical and/or mechanical means.

### PHYSICAL PROPERTIES:

Mixing ratio (by weight): A : B = 100 : 33

	Part A	Part B	Test Method
Color	Clear	Amber	visual
Solid Content (%)	100	100	ASTM D 115
Flash Point (°C)	>100	>100	ASTM D 3278
Specific Gravity	1.16	0.97	ASTM D 792
Viscosity (cps)	11,000	5,000	ASTM D 2393
Shelf Life (months)	12	12	
-min. from date of shipment			
Port Life, min (for 100gm mass.)		~60	ASTM D2471

\* All measurements taken @25°C unless otherwise noted.

TYPICAL PHYSICAL PROPERTIES:	Properties	Test Method
Color	Amber	visual
Coefficient of Linear Thermal Expansion, °C <sup>-1</sup> (0°C to 50°C)	80 x 10 <sup>-6</sup>	ASTM D 3386
Glass Transition Temperature (T <sub>g</sub> ), °C	~50	ASTM D 3386
Specific Gravity	~1.11	ASTM D 792
Hardness, Shore D	~85	ASTM D2240
CURED ELECTRICAL PROPERTIES:	Properties	Test Method
Dielectric Constant @25°C, 100Hz	4.5	ASTM D 150
Volume Resistivity @500V, Ohm-cm	3.5 x 10 <sup>13</sup>	ASTM D 257
Surface Resistivity @500V, Ohm	4 x 10 <sup>14</sup>	ASTM D 257
Dissipation Factor @25°C, 100Hz	0.010	ASTM D 150

\* All measurements taken @25 oC unless otherwise noted.

### APPLICATION:

1. By dispenser, dispensing system
2. Weight accurately; any variation in mix ratio will result in degraded properties
3. Use only in ventilated area
4. Use protective goggle, mask and gloves.
5. Avoid skin contact (Part B is CORROSIVE!)
6. Part B is heat & moisture sensitive. Leaving the can open during long application will lead to yellowing and decrease in shelf life.

**Caution: Avoid large mass., severe exotherm may occur!!**

7. Because of the high purity, crystallization may occur if the storage temperature is < 20°C. Customer can heat the Part A in an oven at 80-100°C, until the Part A appears complete transparent. This method will not effect the properties of the material. Completely cool down the material before mixing with Part B.

### CURING TIMES:

@ 100 °C	30 min.
@ 60 °C	2 hours
@ 25 °C	3 days

### CLEAN UP:

Tools should be cleaned immediately after use with soap and water. Solvents such as Xylol or paint thinner can also be used. But care should be taken before using any flammable & hazardous solvents.

### DISPOSAL:

Dispose in accordance with local regulations. Use licensed hazardous waste company. Empty containers may contain product residue, including flammable or explosive vapor. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been properly disposed of.

### STORAGE:

- Store in a cool, dry place (Part B is heat & moisture sensitive).
- Mix Part A & Part B separately before mixing A and B Parts.
- Mixed materials cannot be stored for future use.
- Shelf-life would be shortened if the container had ever been opened.

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### For Industrial Use Only

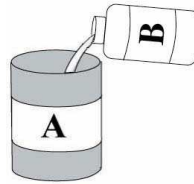
**KEEP OUT OF THE REACH OF CHILDREN.**

12/28/06

## Mixing & Storage of Epoxy

Mix the materials according to the mixing ratio (by weight)

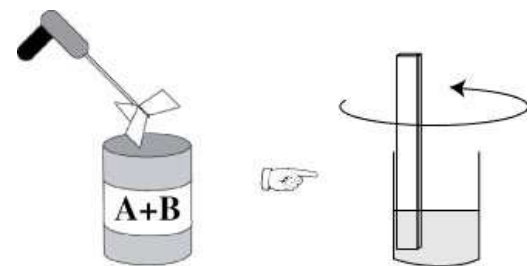
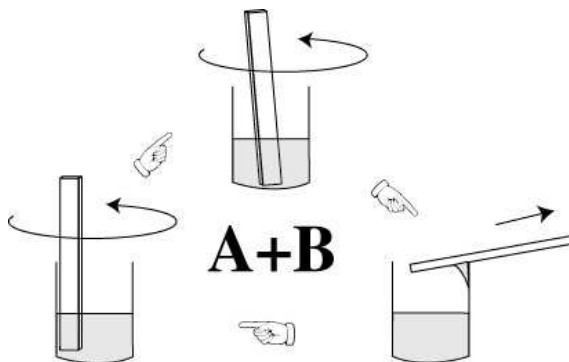
After mixing, curing process will be started.  
Calculate the ideal mixing amount according to the designated pot life. <sup>P.S.2.</sup>



Empty Part B entirely into the can of Part A

Manual Mixing

Electrical Mixing



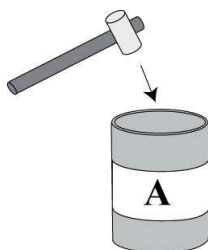
- \* Perpendicularly stir with a paint paddle
- \* Mix the material thoroughly, including the sediment and material sticking on inner of the can. Repeat thrice
- \* Mixing for 2-3 minutes until completely blended

- \* Stir with a Jiffy Mixer
- \* Scrape the material sticking on the can's inner into the mixed component
- Repeat mixing

- P.S.:**
1. Avoiding produce bubbles during mixing. Bubbles can be reduced by vacuumizing.
  2. Pls. refer to the relevant technical data sheet for particular product's pot life.

Storage

- \* Unmixed materials should be gastightly stored



Safety

- \* Use only in ventilated area
- \* Use fume mask and gloves
- \* Wear goggles
- \* Use within the pot life or the mixed component will produce severe exotherm

