



## **TC-1622 A/B**

### **LOW VISCOSITY HIGH TEMPERATURE EPOXY LAMINATING RESIN**

#### **PRODUCT DESCRIPTION:**

TC-1622 A/B is an unfilled laminating resin for high temperature mold and part fabrication. TC-1622 A/B is non-staining and ideal for making molds from wood or plaster where it is impractical to use heat to cure. A TC-1622 A/B laminate can be removed from the master after 24 hours and post-cured to 300-350° F (149-177° C) without sagging or distortion when a support backup structure has been added to the laminate. TC-1622 A/B is formulated to provide superior wet-out and adhesion to a variety of substrates. When properly cured TC-1622 A/B can be used for prolonged periods at 350°F (177°C) and can be used at temperatures to 400°F (204°C) intermittently.

#### **PRODUCT HIGHLIGHTS:**

- √ Easy to use for lay-ups requiring vacuum bagging
- √ Withstands temperatures to 350° F (177° C)
- √ Seals porous surfaces with excellent adhesion

#### **PRODUCT APPLICATIONS:**

- √ Vacuum-form molds
- √ RTM/RIM parts
- √ Auto-clave molds
- √ High temperature jigs and fixtures

#### **PHYSICAL PROPERTIES:**

Hardness, Shore D ASTM D-2240 .....	85 ± 2
Specific Gravity, (g/cc) cured ASTM D-792 .....	1.14
Cubic Inches Per Pound .....	25.1
Color/Appearance.....	Opaque yellow
Tensile Strength, (psi) ASTM D-638.....	9,500
Tensile Modulus, (psi) ASTM D-638.....	3.2 x 10 <sup>5</sup>
Elongation, (%) ASTM D-638.....	5
Flexural Strength, (psi) ASTM D-790.....	12,600
Flexural Modulus, (psi) ASTM D-790 .....	3.8 x 10 <sup>5</sup>
Shrinkage, (in./in.) linear (12" x 1/2" x 1/2") .....	0.008
Izod Impact, (ft.-lb./in.) ASTM D-256.....	0.44
TG, °F (°C).....	330°F (165°C)
Laminate Service Temperature.....	350°F (177°C)

**Note:** Reported physical properties based on elevated temperature cured test specimens.

#### **HANDLING PROPERTIES:**

Mix Ratio (by weight):	
Part A .....	100 parts by weight
Part B .....	20 parts by weight
Mix Ratio (by volume):	
Part A .....	100 parts by volume
Part B .....	23 parts by volume
Specific Gravity, (g/cc):	
Part A .....	1.13
Part B .....	0.98
Viscosity, (cps) @ 77°F (25°C) Brookfield:	
Part A .....	550
Part B .....	250
Mixed.....	600
Work Time, (100-gram mass) @ 77°F (25°C).....	2 hours
Gel Time .....	2.5 hours
Demold Time @ 77°F (25°C).....	24 hours

**POST CURING:**

All physical property results are based upon post-curing this system. The following procedure provides the best results:

- 150° F (66° C) for 1.5 to 2 hours
- 250° F (121° C) for 2 hours
- 300° F (149° C) for 1 hour
- 350° F (177° C) for 1 hour

Allow to cool in the oven. This procedure provides further stabilization and eliminates possible thermal shocks for cavity tools that are temporarily clamped together for curing purposes.

**PACKAGING:**

1 Gallon Kits.....	9 lbs. A, 1.8 lbs. B
5 Gallon Kits.....	40 lbs. A, 8 lbs. B
Drum Kits .....	400 lbs. A, 80 lbs. B

**STORAGE:**

Store at 55-90° F (13-32° C) in a dry location. Unopened containers will have a shelf life of 12 months, from date of shipment when properly stored at room temperature. Keep containers tightly sealed after use.

**SAFETY PRECAUTIONS:**

Use in a well-ventilated area. Avoid contact with skin using protective gloves and protective clothing. Repeated or prolonged contact on the skin may cause an allergic reaction. Eye protection is extremely important. Always use approved safety glasses or goggles when handling this product.

**IF CONTACT OCCURS:**

**Skin:** Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. Seek qualified medical attention if allergic reactions occur.

**Eyes:** Immediately flush with water for at least 15 minutes. Call a physician.

**Ingestion:** If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.

**Refer to the Material Safety Data Sheet before using this product.**