



TC-1600 A/B

GENERAL PURPOSE CLEAR EPOXY LAMINATING RESIN

PRODUCT DESCRIPTION:

TC-1600 A/B is an unfilled, low viscosity laminating resin generally used for fabricating reinforced laminates. It features an ability to cure at room temperature for applications that do not require a working service temperature above 180°F (82°C). This system can provide service up to 300°F (149°C) when post-cured.

PHYSICAL PROPERTIES: (1/4" laminates, 10 oz. cloth, post-cured specimens)

Hardness, Shore D ASTM D-2240.....	95
Specific Gravity, (g/cc) cured ASTM D-792	1.17
Cubic Inches per Pound	24.7
Color/Appearance.....	Clear
Tensile Strength, (psi) ASTM D-638.....	35,000
Flexural Strength, (psi) ASTM D-790.....	40,500
Flexural Modulus, (psi) ASTM D-790	2.3 x 10 ⁶
Shrinkage, (in./in.).....	0.00015
Izod Impact, (ft.lb./in.) ASTM D-256.....	5
Heat Deflection Temperature, ASTM D-648	250°F (121°C)
Compressive Strength, (psi) ASTM D-695	42,000
Water absorption, (% in 100 Hours) ASTM D-570	1.5
Coefficient of Thermal Expansion, (in./in./F°) ASTM D-3386.....	1.1 x 10 ⁻⁵

HANDLING PROPERTIES:

Mix Ratio (by weight):

Part A	100 parts by weight
Part B	20 parts by weight

Specific Gravity (g/cc):

Part A	1.15
Part B	0.98

Mixed Viscosity, (cps) ASTM D-2393..... 1,700

Work Time, 1-lb. mass, 77°F (25°C).....30 minutes

Demold Time @ 77°F (25°C)

12 – 15 hours

POST CURE:

TC-1600 A/B may need to be post cured when parts or tools will be subject to service temperatures in excess of 180°F (82°C), or after laminating in cold weather conditions. Generally, most laminates can be de-molded at room temperature after 12 - 15 hours. Post-curing will expedite demold time, however a laminate should always be allowed to cool to room temperature before demolding.

RECOMMENDED CURE SCHEDULE:

- 1) 77°F (25°C) - 16-24 hours [Will provide service to 180°F (82°C)]
- 2) 150°F (66°C) - 2 hours followed by step #3
- 3) 250°F (121°C) - 1 hour [Will provide service to 300°F (149°C)]

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.

PACKAGING:

Gallon Kits9 lbs. A, 1.8 lbs. B
5-Gallon Kits40 lbs. A, 8 lbs. B
55-Gallon Drum Kits400 lbs. 80 lbs. B

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. It is *not* recommended to remove resin from skin with solvents. Solvents only increase contact and dry skin. 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. Contact a physician immediately.

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

NON-WARRANTY "Except for a warranty that materials substantially comply with the data presented in Manufacturer's latest bulletin describing the product (the basis for this substantial compliance is to be determined by the standard quality control tests generally performed by Manufacturer), all materials are sold "AS IS" and without any warranty express or implied as to merchantability, fitness for a particular purpose, patent, trademark or copyright infringement, or as to any other matter. In no event shall Manufacturer's liability for damages exceed Manufacturer's sale price of the particular quantity with respect to which damages are claimed."