

TC-1604 A/B GENERAL PURPOSE WHITE LAMINATING SYSTEM

TC-1604 A/B is a filled, easy to apply, laminating epoxy resin for variety of fabricating applications. Designed to be used with heavier weight fiberglass cloth (typically 8-10 oz. tooling fabric), TC-1604 can produce thick laminates without excess draining of the resin. Being a very stable system with low shrinkage, its common usages include:

- Drill and Trim Fixtures
- Composite Tooling
- Pattern/Foundry Applications
- Support Shells for Silicone Glove Molds

It features the ability to cure at room temperature for applications that do not require a working service temperature above 224°F (107°C). TC-1604 can also be used as an adhesive for bonding wood, composites, and other materials. Adding fillers like fumed silica, micro-spheres, and short-strand fibers can create pastes for fillets, fairings, and bonding applications.

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULTS
Hardness, Shore D	ASTM D2240	89
Density (g/cc)	ASTM D792	1.3
Cubic Inches per Pound	N/A	24.1
Tensile Strength (psi)	ASTM D638	32,000
Flexural Strength (psi)	ASTM D790	39,000
Flexural Modulus (psi)	ASTM D790	2.3 x 10 ⁶
Shrinkage (in/in) linear	ASTM D2566	0.00015
Heat Deflection Temperature @ 264 psi	ASTM D648	224°F (106.7°C)
Water Absorption (% in 100 hours)	ASTM D570	1.25
Compressive Strength (psi)	ASTM D695	40,000
Coefficient of Thermal Expansion (in/in/°F)	ASTM D3386	1.2 x 10 ⁻⁵

HANDLING PROPERTIES	Part A	Part B
Mix Ratio by weight	100	12
Mix Ratio by volume	100	15
Specific Gravity @ 77°F (25°C)	1.28	1.02
Color	White	Amber
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	8,000	
Work Time, 1 lb. mass @ 77°F (25°C)	20 minutes	
Cure Schedule	8-12 hours	

Properties above are typical and not for specifications.

STORAGE:

Store at ambient temperatures, 65-80°F (18-27°C). Unopened containers will have a shelf life of 12 months from date of shipment when properly stored at recommended temperatures. Purge opened containers with dry nitrogen before re-sealing.

PACKAGING	Part A	Part B
Gallon Kit	10 lbs.	1.2 lbs.
5-Gallon Kits	50 lbs.	6 lbs.
Drum Kits	500 lbs.	60 lbs.

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.

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

 WARNING: This product can expose you to chemicals including Titanium dioxide and Furfuryl alcohol, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.