

# **EPOXY RESIN SYSTEMS**

"Dedicated to QUALITY, SERVICE, SAFETY, and INNOVATION"

# TC-1622 A/B LOW VISCOSITY HIGH TEMPERATURE EPOXY LAMINATING RESIN

TC-1622 A/B is an unfilled laminating resin for high temperature mold and part fabrication formulated to provide superior wet-out and adhesion to a variety of substrates. It is a great material for Vacuum Assisted Resin Transfer Molding (VARTM) as well as other wet lay-up methods due to its low viscosity and long working time. When properly cured TC-1622 A/B can be used up to 350°F (177°C).

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULTS
Hardness, Shore D	ASTM D2240	85 ± 2
Density (g/cc)	ASTM D792	1.14
Cubic Inches per Pound	N/A	25.1
Color/Appearance	Visual	Yellow Opaque
Tensile Strength (psi)	ASTM D638	9,500
Tensile Modulus (psi)	ASTM D638	320,000
Elongation (%)	ASTM D638	5
Flexural Strength (psi)	ASTM D790	12,600
Flexural Modulus (psi)	ASTM D790	380,000
Shrinkage (in/in) linear	12"x ½" x ½"	0.008
Izod Impact, notched (ft-lb/in)	ASTM D256	0.44

Reported physical properties based on elevated temperature cured test specimens.

HANDLING PROPERTIES	Part A	Part B	
Mix Ratio by weight	100	20	
Mix Ratio by volume	100	23	
Specific Gravity @ 77°F (25°C)	1.13	0.98	
Color	Colorless	Amber	
Viscosity (cps) @ 77°F (25°C) Brookfield	550	250	
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	600		
Work Time, 100g mass @ 77°F (25°C)	2 hours		
Gel Time	2.5 hours		
Demold Time @ 77°F (25°C)	24 hours		

Properties above are typical and not for specifications.

Date: 07/21/2017

## **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.

# **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	Cubic Inches per Kit
Gallon Kits	9 lbs.	1.8 lbs.	271
5-Gallon Kits	40 lbs.	8 lbs.	1,205
55-Gallon Drum Kits	400 lbs.	80 lbs.	12,048

## **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.



TC-1622 Part A SDS



TC-1622 Part B SDS

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