



TC-4485 A/B

IRON-FILLED EPOXY MASS CASTING SYSTEM

TC-4485 A/B is a room temperature curing, mass castable epoxy resin system that produces a tough, dense, low shrink solid material with fine detail reproduction. TC-4485 A/B is designed for single-pour castings up to 3" thick, or for thicker castings up to 8" using a stage pour procedure.

- Slower reacting system designed for thicker casts
- Improved viscosity for easier pouring

TYPICAL PRODUCT USES:

- Molds
- Patterns
- Cast Parts
- Form Dies

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULTS
Hardness, Shore D	ASTM D2240	85 ± 2
Density (g/cc)	ASTM D792	2.1
Cubic Inches per Pound	N/A	13.1
Tensile Modulus (psi)	ASTM D638	5.2 x 10 ⁷
Flexural Strength (psi)	ASTM D790	9,450
Flexural Modulus (psi)	ASTM D790	3.2 x 10 ⁵
Izod Impact (ft-lb/in)	ASTM D256	2.0
Shrinkage (in/in)	ASTM D2566	<0.001
Compressive Strength (psi)	ASTM D695	13,320
Coefficient of Thermal Expansion (in/in/F°)	ASTM D3386	3.0 x 10 ⁻⁵

HANDLING PROPERTIES	Part A	Part B
Mix Ratio by weight	100	8
Mix Ratio by volume	100	15
Specific Gravity @ 77°F (25°C)	1.80	0.99
Color	Black	Amber
Viscosity (cps) @ 77°F (25°C) Brookfield	278,000	70
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	42,500	
Work Time, 1 lb. mass @ 77°F (25°C)	3 ± 0.5 hours	
Demold Time @ 77°F (25°C)	16 – 24 hours	
Cure Time @ 77°F (25°C)	3 – 5 days	

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	Cubic Inches per Kit
5-Gallon Kits	60 lbs.	5 lbs.	852

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-4485 Part A SDS



TC-4485 Part B SDS