



# RIGID FILLED & UNFILLED URETHANES

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

## TC-812 A/B LIGHTCAST

### PRODUCT DESCRIPTION:

TC-812 A/B is a light weight filled, low viscosity, quick setting, easy to use casting material. A model or tool cast from TC-812 A/B will weigh 40% less than other unfilled urethane systems. Within 60 minutes after mixing and pouring, it is ready to be carved, sanded, filed, tapped, etc. Its characteristics make it ideal for lightweight backing of laminates and/or surface coats. Perfect for fast take offs, cores, engineering changes, temporary molds, patterns, models, prototypes, and bases for die molds.

### PHYSICAL PROPERTIES:

Hardness, Shore D ASTM D2240 .....	60 - 65
Density, (g/cc) ASTM D792 .....	0.64
Cubic Inches per Pound.....	43.4
Tensile Strength, (psi) ASTM D638.....	2,575
Flexural Strength, (psi) ASTM D790 .....	2,730
Flexural Modulus, (psi) ASTM D790.....	1.71 x 10 <sup>5</sup>
Shrinkage, (in/in) linear ASTM D2566.....	0.003
Heat Deflection Temperature, ASTM-D648.....	133°F (56°C)
Compressive Strength, (psi) ASTM D695.....	3,050

### HANDLING PROPERTIES:

Mix Ratio (by weight):	
Part A .....	100 parts by weight
Part B .....	100 parts by weight
Specific Gravity @ 77°F (25°C):	
Part A .....	0.65
Part B .....	0.61
Viscosity, (cps) @ 77°F (25°C) Brookfield:	
Part A .....	650
Part B .....	875
Mixed.....	750
Work Time, ½ lb. mass @ 77°F (25°C) .....	4 minutes
Gel Time .....	6 minutes
Demold Time @ 77°F (25°C).....	1 hour
	Dependent upon wall thickness of casting.

**MIXING INSTRUCTIONS:**

Both sides of TC-812 A/B must be pre-mixed. We recommend using a Jiffy Mixer™ to resuspend the fillers. Then combine equal parts of A and B by weight. Mix thoroughly in a polyethylene pail scraping the sides and bottom, de-air the mixture and pour within two minutes. For best results, be sure that TC-812 A/B and molds are at room temperature.

**STORAGE:**

Store in a cool dry place. Unopened containers of will have a shelf life of 6 months from date of shipment when properly stored at room temperatures. Purge opened containers with dry nitrogen before re-sealing.

**PACKAGING:**

Gallon Kits..... 3.6 lbs. A, 3.6 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.

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