

TC-812 A/B LIGHTCAST

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	TEST METHOD	RESULTS
Hardness, Shore D	ASTM D2240	60 – 65
Density (g/cc)	ASTM D792	0.64
Cubic Inches per Pound	N/A	43.4
Color/Appearance	Visual	Opaque Yellow
Tensile Strength (psi)	ASTM D638	2,575
Flexural Strength (psi)	ASTM D790	2,730
Flexural Modulus (psi)	ASTM D790	1.71 x 10 ⁵
Shrinkage (in/in) linear	12"x1/2"x1/2"	0.003
Heat Deflection Temperature @ 66psi	ASTM D648	133°F (56.1°C)
Compressive Strength (psi)	ASTM D695	3,050

HANDLING PROPERTIES	Part A	Part B
Mix Ratio by weight	100	100
Mix Ratio by volume	94	100
Specific Gravity @ 77°F (25°C)	0.65	0.61
Color	Yellow	White
Viscosity (cps) @ 77°F (25°C) Brookfield	650	875
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	750	
Work Time, 0.5 lb. mass @ 77°F (25°C)	4 minutes	
Gel Time	6 minutes	
Demold Time @ 77°F (25°C)	60 minutes	

Properties above are typical and not for specifications.

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.

ACCESSORIES:

BJB offers silicone RTV mold making materials along with a wide range of accessory items. These include de-airing agents, pigments, mold releases, and Jiffy® Mixers. Visit BJB's website at www.bjbenterprises.com or consult a BJB representative for more information.

STORAGE:

Store at ambient temperatures, 65-80°F (18-27°C). Unopened containers will have a shelf life of 6 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	3.6 lbs.	3.6 lbs.	313

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 Dibutyl phthalate, which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.



Handling Guide



TC-812 Part A SDS



TC-812 Part B SDS