

## TC-816 A/B GRAY FAST CAST URETHANE FOR TOOLING AND PARTS

TC-816 A/B is a durable, filled polyurethane system that offers excellent duplication properties. TC-816 A/B exhibits low shrink, low exotherm and quick demold times.

- Exceptionally low viscosity
- Low exotherm contributing to low shrinkage
- Greater settling resistance
- Integrates well with epoxy surface coats for polishable tools
- Workable in semi-gel stage as a paste if desired
- Will readily bond to itself
- Safe to use with platinum based silicones

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULTS
Hardness, Shore D	ASTM D2240	85 ± 2
Density (g/cc)	ASTM D792	1.62
Cubic Inches per Pound	N/A	17.2
Color/Appearance	Visual	Gray/Opaque
Shrinkage (in/in) linear	ASTM D2566 @ 1" depth	0.004
Compressive Strength (psi)	ASTM D695	9,200
Heat Deflection Temperature @ 66psi	ASTM D648-04	218°F (103°C)
Heat Deflection Temperature @ 264psi	ASTM D648-04	208°F (98°C)

HANDLING PROPERTIES	Part A	Part B
Mix Ratio by weight	100	100
Mix Ratio by volume	100	100
Specific Gravity @ 77°F (25°C)	1.60	1.60
Color	Black	White
Mixed Viscosity (cps) @77°F (25°C) Brookfield	1,000	
Work Time, 100g mass @ 77°F (25°C)	5 minutes	
Demold Time @ 77°F (25°C)	1 – 2 hours	

Properties above are typical and not for specifications.

**MIXING INSTRUCTIONS:**

TC-816 A/B settles on standing but is easily remixed. Thoroughly mix cans A and B separately, preferably with a Jiffy Mixer. Then combine equal parts of A and B by weight or volume. Mix thoroughly and pour promptly. Be sure all material on the sides and bottom are well mixed. After each use, cans should be purged with dry nitrogen and tightly sealed to prevent moisture in the air from reacting with the contents.

**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](http://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	10 lbs.	10 lbs.	344

**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 (DBP), 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](http://www.P65Warnings.ca.gov).



Handling Guide



TC-816 Part A SDS



TC-816 Part B SDS

NON-WARRANTY "Except for a warranty that materials substantially comply with the data presented in Manufacturer's latest bulletin describing the product (the basis for this substantial compliance is to be determined by the standard quality control tests generally performed by Manufacturer), all materials are sold "AS IS" and without any warranty express or implied as to merchantability, fitness for a particular purpose, patent, trademark or copyright infringement, or as to any other matter. In no event shall Manufacturer's liability for damages exceed Manufacturer's sale price of the particular quantity with respect to which damages are claimed."