

TC-882 A/B RIGID 80 SHORE D URETHANE CASTING SYSTEM

PRODUCT DESCRIPTION:

TC-882 A/B produces a high impact rigid 80 Shore D material that is commonly used to make large computer housings, models of all kinds and artwork components. It provides a long working time of 30 minutes verses 15 minutes for TC-881 and 5 - 8 minutes with the TC-880. The three systems produce the same physical properties after curing, however, the TC-882 allows ample time for pouring larger parts.

PRODUCT HIGHLIGHTS:

- ✓ Convenient mixing ratio: 1 to 1 parts by weight
- ✓ Long working time: 30 minutes
- ✓ Low viscosity, flows easily
- ✓ Demold time: 16 24 hours at ambient temperature in a silicone rubber mold (1/8" thick section)
- ✓ No odor, low exotherm and will prolong the life of a silicone mold. Exudate free.

TYPICAL PRODUCT USES:

- ✓ Computer Housings
- ✓ Model of all kinds
- ✓ Artwork components
- ✓ Architectural models
- ✓ Gears, wheels, fans
- ✓ Transportation cases
- ✓ Miniatures, movie props, parts
- ✓ Simulating injection molded pieces

PHYSICAL PROPERTIES:

Hardness, Shore D ASTM D-2240	80 ± 2
Specific Gravity, (g/cc) cured ASTM D-792	
Cubic Inches per Pound	24.8
Color/Appearance	
Tensile Strength, (psi) ASTM D-638	
Tensile Modulus, (psi) ASTM D-638	
Elongation, (%) ASTM D-638	15.5
Flexural Modulus, (psi) ASTM D-790	$2.0x10^5$
Flexural Strength, (psi) ASTM D-790	
Shrinkage, (in./in.) ASTM D-2566 (3/8" depth)	
Izod Impact, (ftlb./in.) ASTM D-256	
Compressive Strength, (psi) ASTM D-695	

Note: Reported physical properties based on elevated temperature cured test specimens.

HANDLING PROPERTIES:

Mix Ratio (by weight):

Part A	
Part B	
Mix Ratio (by volume):	
Part A	
Part B	
Specific Gravity (g/cc):	
	1.18
Mixed Viscosity (cps) @ 77°F (25°C)	250 ± 10
Color:	
Part A	clear, faint yellow
	hazy, off white
Demold Time @ 77°F (25°C)	
Cure ScheduleF	or maximum physical properties the material should be post cured
	at 160°F (71°C) for 6 hours. This gives a HDT of 140°F (60°C).

HEAT CURING:

Enhanced physical properties can be achieved by post-curing TC-882 parts for a period of 4 to 6 hours at a minimum of $150^{\circ}F$ ($66^{\circ}C$) and to a maximum of $175^{\circ}F$ ($79^{\circ}C$). Six hours at $160^{\circ}F$ ($71^{\circ}C$) will provide a final heat distortion temperature @ 66 psi of $140^{\circ}F$ ($60^{\circ}C$). Parts generally should be supported during post-cures.

NOTE:

It is advisable whenever possible to evacuate entrapped air prior to casting this system. The use of a de-airing agent can speed up the process. BJB's AF-4 antifoam works best as the de-airing agent. In conjunction with these support products BJB offers pigments in a wide variety of colors and stainless steel mixers called "Jiffy Mixers." If help is required call BJB for assistance. For additional information on the use of this product, refer to BJB Guidelines for Handling Polyurethane Products.

STORAGE:

Store in a cool dry place. Unopened containers 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	
5-Gallon Kits	
55-Gallon Drum Kits	

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.

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