



RIGID FILLED & UNFILLED URETHANES

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

TC-891 FR REV 1
RIGID 80 SHORE D URETHANE CASTING SYSTEM
FIRE RETARDANT



PRODUCT DESCRIPTION:

TC-891 FR REV 1 incorporates a non-mercury based catalyst system that produces a tough 80 shore D material with a 12 minute work time. This system can be used to hand pour or machine cast electronic enclosures and all types of parts requiring flame retardant characteristics.

PRODUCT HIGHLIGHTS:

- Non-mercury
Demold time: 3-4 hours at ambient temperature in a silicone rubber mold (1/8" thick section)
RoHS compliant
UL 94V-0 Listed, flammability rating at 1/16" thickness (File# E174527)

PHYSICAL PROPERTIES:

Table with 2 columns: Property Name and Value. Includes Hardness, Density, Tensile Strength, Elongation, etc.

Note: Reported physical properties are based on test specimens cured at an elevated temperature, 180°F (82°C).

HANDLING PROPERTIES:

Table with 2 columns: Mix Ratio (by weight/volume) and Parts by weight/volume. Includes Part A and Part B.

HANDLING PROPERTIES (continued):

Specific Gravity @ 77°F (25°C):	
Part A.....	1.18
Part B.....	1.33
Viscosity, (cps) @ 77°F (25°C) Brookfield:	
Part A.....	325
Part B.....	1,450
Mixed	740
Color:	
Part A.....	Yellow
Part B.....	White
Work Time, 100g mass @ 77°F (25°C).....	12-14 minutes
Gel Time	13-15 minutes
Demold Time @ 77°F (25°C)	3-4 hours

CURE SCHEDULE/HEAT CURING:

Most of the physical properties can be achieved in 5-7 days at ambient temperature, 77°F (25°C). In order to achieve maximum physical properties, a post cure with heat is required. BJB recommends 24 hours at ambient temperature, 77°F (25°C), followed by 16 hours at 150-180°F (66-82°C). Support of the part may be required to prevent part deformation during heat cure.

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-5 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	5.6 lbs. A, 8 lbs. B
5-Gallon Kits	28 lbs. A, 40 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.