



TC-1642 A/B

BLACK COLORED FILLED POLYURETHANE FAST CAST

PRODUCT DESCRIPTION:

TC-1642 A/B is a 80 shore D, tough, fast setting filled polyurethane casting resin system which is ideal for a wide range of casting jobs such as pattern duplication, foundry core boxes, wax casting molds, and general casting molds. This system is frequently used for prototype parts. TC-1642 A/B has been formulated to reduce the hard packing of the fillers.

PRODUCT HIGHLIGHTS:

- High Compressive and Impact Strengths
- Very Low Shrinkage, Low Exotherm
- Equal Part Mix by Weight
- Short Demold Time
- Excellent Wear Resistance
- Excellent Detail Reproduction
- Low Viscosity
- Good Paintability

PHYSICAL PROPERTIES:

Hardness, Shore D ASTM D-2240	80
Specific Gravity, (g/cc) cured ASTM D-792.....	1.60
Cubic Inches per Pound	16.8
Color/Appearance.....	Black
Flexural Strength, (psi) ASTM D-790	7,000
Shrinkage (in./in.) linear ASTM D-2566	0.001
Compressive Strength, (psi) ASTM D-695.....	9,000

HANDLING PROPERTIES:

Mix Ratio (by weight):

Part A.....	100 parts by weight
Part B	100 parts by weight

Specific Gravity (g/cc):

Part A.....	1.73
Part B	1.60

Viscosity (cps) @ 77°F (25°C) Brookfield:

Part A.....	900
Part B	1300
Mixed.....	1100

Color:

Part A.....	Tan
Part B	Black

Work Time @ 77° F (25° C)	4 - 6 minutes
Demold Time.....	1 hour

TC-1642 A/B can be demolded 1 – 2 hours after casting, even in thin sections of 1/4" or less. It also may be cast very thick without creating excessive exotherm. Thick sections (e.g. over 4 inches) can generate somewhat increased shrinkage. To avoid this problem, casting around a displacement core or stage pouring is recommended.

TC-1642 A/B can be cast into all dry mold materials such as metal, plastic, urethane, RTV silicones, sealed wood or plaster. Plaster molds should be sealed with RF-5124 or an appropriate sealer, followed by two coats of a paste wax such as Meguiar's # 87.

MIXING INSTRUCTIONS:

TC-1642 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. Mix thoroughly for not more than 30 seconds and pour promptly. Do not mix in the original containers. Polyethylene mixing pails are excellent and may be reused. 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.

CAUTION:

Platinum cure silicone rubbers will not cure against the TC-1642 A/B. Request further information from BJB's technical staff for recommended products and procedures.

STORAGE:

Store in a cool dry place. Unopened containers of TC-1642 A/B will have a shelf life of 6 months, from date of shipment, when properly stored under normal temperature conditions, 75°F (25°C).

PACKAGING:

1 Gallon Kits.....10 lbs. A, 10 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.