

## CF-50AM A/B

### 50 SHORE A POLYURETHANE ELASTOMER



CF-50AM polyurethane elastomer is a 50 shore A, low odor, tough, Mercury Free system perfect for a variety of cast parts or mold making applications. Its unique ability to accept pigments ranging from light to dark colors and color stability when exposed to moderate UV light makes it a great system for prototype or production parts.

- RoHS/REACH Compliant
- Phthalate Free
- Good Color Stability
- Mercury Free
- Low Odor
- Easy to Pigment
- Tough, Tear Resistant
- Good Rebound & Abrasion

| PHYSICAL PROPERTIES        | TEST METHOD           | ELEVATED TEMPERATURE CURE* |
|----------------------------|-----------------------|----------------------------|
| Hardness, Shore A          | ASTM D2240-04e1       | 50 ± 5                     |
| Density (g/cc)             | ASTM D792-00          | 1.08                       |
| Cubic Inches per Pound     | N/A                   | 26.3                       |
| Color/Appearance           | Visual                | White                      |
| Tensile Strength (psi)     | ASTM D412-98a(2002)e1 | 550                        |
| Tensile Modulus (psi)      | ASTM D412-98a(2002)e1 | 400                        |
| Elongation (%)             | ASTM D412-98a(2002)e1 | 250                        |
| Tear Strength (pli)        | ASTM D624-00e1        | 40                         |
| Shrinkage (in/in) linear   | ASTM D2566 @ 1" depth | 0.005†                     |
| Dielectric Constant, 1 MHz | ASTM D150-87          | 5.564                      |
| Dissipation Factor, 1 MHz  | ASTM D150-87          | 0.1052                     |

\*Note: Reported physical properties are based on test specimens cured 2-3 hours at room temperature then 16 hours at 160°F (71°C).

†Shrink test specimens are cured for 24 hours at room temperature and then 16 hours at 160°F (71°C).

| HANDLING PROPERTIES                            | Part A          | Part B |
|--|-----------------|--------|
| Mix Ratio by weight                            | 50              | 100    |
| Mix Ratio by volume                            | 48              | 100    |
| Specific Gravity @ 77°F (25°C)                 | 1.09            | 1.04   |
| Color  | Pale Yellow     | White  |
| Viscosity (cps) @ 77°F (25°C) Brookfield       | 800             | 1,100  |
| Mixed Viscosity (cps) @ 77°F (25°C) Brookfield | 1,000           |        |
| Work Time, 100g mass @ 77°F (25°C)             | 12 – 14 minutes |        |
| Gel Time                                       | 16 – 18 minutes |        |
| Demold Time @ 77°F (25°C)                      | 4 – 6 hours     |        |

Properties above are typical and not for specifications.

**IMPORTANT MIXING DIRECTION:**

It is important to remix the “A” component thoroughly prior to each use before combining with the “B” side.

**CURE SCHEDULE/HEAT CURING:**

Most of the physical properties can be achieved in 5-7 days at 77°F (25°C). You may use your own post-cure schedule but the physical properties may vary from BJB’s cure schedule of 1-3 hours at 77°F (25°C) followed by 16 hours at 160°F (71°C). Do not exceed curing temperature of 200°F (93°C).

**PREPARATION AND RELEASING:**

When CF-50AM A/B is used to produce molds or parts from plaster, wood or other porous substrates, we would first recommend that they be sealed. Release agents may then be applied over the sealed surface.

**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 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 |
|---------------------|----------|----------|----------------------|
| Quart Kits          | 1 lbs.   | 2 lbs.   | 79                   |
| Gallon Kits         | 4 lbs.   | 8 lbs.   | 316                  |
| 5-Gallon Kits       | 20 lbs.  | 40 lbs.  | 1,578                |
| 55-Gallon Drum Kits | 225 lbs. | 450 lbs. | 17,753               |

**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 Styrene, which is/are known to the State of California to cause cancer. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).



Handling Guide

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."