



F-90 A/B

HIGH PERFORMANCE 90 SHORE A POLYURETHANE ELASTOMER

PRODUCT HIGHLIGHTS:

- Exceptional abrasion and impact resistant
- Contains no TDI, MDI, MDA, OR MOCA
- Easy to handle
- Easily tinted to any color
- Room temperature mixing and curing
- Short demold times allows for production parts

PRODUCT DESCRIPTION:

F-90 A/B is a two-component urethane casting compound that is specifically formulated for high abrasion and impact resistance. It is recommended for use for the production casting of highly wear-resistant parts and linings. This product is a safe, easy-to-handle, room temperature mixing and curing system that does not contain TDI, MDI, MDA, or MOCA. F-90 A/B is relatively insensitive to typical environmental moisture and will make good void-free parts without the problems that some conventional urethane systems exhibit. Because of this product's exceptional toughness and abrasion resistance, castings made with F-90 A/B are particularly suitable for the mineral process and metal forming industries.

TYPICAL PRODUCT USES:

- ◆ Abrasion-resistant parts and linings
- ◆ Bumpers and rub rails
- ◆ Paper feed rollers
- ◆ Potting and encapsulation applications
- ◆ Semi-flexible molds
- ◆ Metal forming die facings
- ◆ Holding fixtures
- ◆ Machinery base pads

PHYSICAL PROPERTIES:

| | |
|---|------------|
| Hardness, Shore A ASTM D-2240 | 90 ± 2 |
| Specific Gravity, (g/cc) cured ASTM D-792 | 1.08 |
| Cubic Inches Per Pound | 25.6 |
| Color/Appearance..... | Tan/Opaque |
| Tensile Strength, (psi) ASTM D-412..... | 3,000 |
| Elongation, (%) ASTM D-412..... | 440 |
| Tear Strength, (pli) ASTM D-624 | 300 |
| Shrinkage, (in./in.) linear ASTM D-2566..... | 0.007 |

HANDLING PROPERTIES:

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|--|---|
| Mix Ratio (by weight): | |
| Part A | 100 parts by weight |
| Part B | 55 parts by weight |
| Mix Ratio (by volume): | |
| Part A | 100 parts by volume |
| Part B | 56 parts by volume |
| Specific Gravity, (g/cc): | |
| Part A | 1.09 |
| Part B | 1.07 |
| Viscosity, (cps) @ 77°F (25°C) Brookfield: | |
| Part A | 6,000 |
| Part B | 1,800 |
| Initial Mixed | 5,000 |
| Color: | |
| Part A | Amber |
| Part B | Tan, opaque |
| Work Time, 100g mass @ 77°F (25°C) | 5 - 6 minutes |
| Gel Time | 9 - 11 minutes |
| Demold Time @ 77°F (25°C) | 1 - 1.5 hours |
| Cure Schedule..... | Full cure in 3 - 5 days at room temperature, or post cure for 16 hours @ 150° - 180°F (66° - 82°C) to enhance physical properties. |

STORAGE:

Store in a dry place at room temperature. Unopened containers of F-90 A/B will have a shelf life of 6 months, from date of shipment, when properly stored under normal temperature conditions, 77°F ± 15°F (25°C ± 10°C). Opened containers are best kept by applying a dry nitrogen blanket before closing lids.

PACKAGING:

| | |
|--------------------------|------------------------|
| 1 Quart kits | 2 lbs. A, 1.1 lbs. B |
| 1 Gallon kits..... | 8 lbs. A, 4.4 lbs. B |
| 5 Gallon kits..... | 40 lbs. A, 22 lbs. B |
| 55-Gallon drum kits..... | 440 lbs. A, 242 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. 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.

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."