



F-42 A/B

42 SHORE A POLYURETHANE ELASTOMER

PRODUCT DESCRIPTION:

F-42 A/B has been designed to provide vastly improved tensile strength and elongation in comparison to the F-40 A/B system it supersedes. The F-42 A/B system is a production oriented fast gel and fast de-mold material. It features a working time which allows time to mix, vacuum de-gas, and pour air-free parts. F-42 A/B can be demolded in 2 - 4 hours at ambient temperature, depending on part size and configuration.

PRODUCT HIGHLIGHTS:

- Rapid demolds
- Ideal for part production
- Does not contain MOCA, MDA, or TDI
- Very easy to use

PHYSICAL PROPERTIES:

Hardness, Shore A ASTM D-2240.....	42 ± 2
Density, (g/cc) ASTM D-792.....	1.07
Cubic Inches per Pound	25.9
Color/Appearance.....	Yellow/transparent
Tensile Strength, (psi) ASTM D-412.....	735
Elongation, (%) ASTM D-412.....	1,080
Tear Strength, (pli) ASTM D-624	65
Shrinkage, (in./in.) linear ASTM D-2566.....	0.005

HANDLING PROPERTIES:

Mix Ratio (by weight):

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

Mix Ratio (by volume):

Part A	92 parts by volume
Part B	100 parts by volume

Specific Gravity:

Part A	1.11
Part B	1.02

Viscosity, (cps) @ 77°F (25°C) ASTM D-2393:

Part A	665
Part B	840
Mixed.....	825

Work Time @ 77°F (25°C)..... 10 - 12 minutes

Demold Time, (mass dependant) @ 77°F (25°C)..... 2 - 3 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 160°F (71°C).

NOTE:

F-42 Part A is moisture sensitive. Open containers of material should be purged with dry nitrogen prior to replacing lids or caps to prevent moisture contamination. F-42 Part B will thicken and become grainy when it is subject to less than ambient temperature. Pre-warm to 80° - 90°F (27° - 32°C) and stir prior to using. Prolonged direct exposure to sunlight can affect the surface of this product. Cover molds or other products when storing outdoors. **The cure will be inhibited if cast against a tin catalyzed silicone RTV.**

STORAGE:

Store at room temperature in a dry area. Unopened containers will have a shelf life of 6 months from date of shipment when properly stored under normal conditions at 75°F (24°C).

PACKAGING:

1 Gallon kits.....	8 lbs. A, 8 lbs. B
5 Gallon kits.....	40 lbs. A, 40 lbs. B
55 Gallon kits.....	400 lbs. A, 400 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.

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."