

F-42 A/B

42 SHORE A POLYURETHANE ELASTOMER

PRODUCT DESCRIPTION:

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 2-3 hours at ambient temperature, depending on part size and configuration. F-42 A/B contains UV stabilizers to provide added protection when used in outdoor applications.

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 D2240-04e1	42 ± 5
Density, (g/cc) ASTM D792-00	1.09
Cubic Inches per Pound.....	.26
Color/Appearance.....	Pale yellow/translucent
Tensile Strength, (psi) ASTM D412-98a (2002)e1	730
Elongation, (%) ASTM D412-98a (2002)e1	660
Tear Strength, (pli) ASTM D624-00e1.....	76
Shrinkage, (in/in) linear ASTM D2566-.....	0.001

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 @ 77 F (25°C):	
Part A.....	1.11
Part B.....	1.02
Viscosity, (cps) @ 77 F (25°C) Brookfield:	
Part A.....	550
Part B.....	750
Mixed.....	850
Work Time (100 g mass) @ 77 F (25°C).....	10 - 12 minutes
Gel Time.....	15 - 17 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 130-160°F (54-71°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 cool temperatures. 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 in a cool dry place. Unopened containers will have a shelf life of 6 months from the date of shipment when properly stored at room temperatures. Purge opened containers with dry nitrogen before re-sealing.

PACKAGING:

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."