



F-50 A/B

55 SHORE A POLYURETHANE ELASTOMER

RATIO: 50/100

PRODUCT DESCRIPTION:

The F-50 A/B is a 55 Shore A production-oriented polyurethane system. This material features quick demold times, excellent physical properties and a non-mercury based catalyst. F-50 A/B processes at ambient temperatures and is easily colored.

PRODUCT HIGHLIGHTS:

- Non-mercury
- Rapid demolds
- Ideal for part production
- Does not contain MOCA, MDA, or TDI
- Very easy to use
- Excellent tear strength and toughness

PHYSICAL PROPERTIES:

Hardness, Shore A ASTM D-2240.....	55 ± 5
Density, (g/cc) ASTM D-792.....	1.07
Cubic Inches per Pound	26.1
Color/Appearance.....	Transparent Pale Yellow
Tensile Strength, (psi) ASTM D-412.....	845
Tensile Modulus, (psi) ASTM D-412	
@ 100% Strain	150
@ 200% Strain	275
@ 300% Strain	390
Elongation, (%) ASTM D-412.....	425
Tear Strength, (pli) ASTM D-624	95
Shrinkage, (in./in.) Linear ASTM D-2566	0.001

HANDLING PROPERTIES:

Mix Ratio (by weight):

Part A	50 parts by weight
Part B	100 parts by weight

Mix Ratio (by volume):

Part A	45 parts by volume
Part B	100 parts by volume

Specific Gravity:

Part A	1.13
Part B	1.03

HANDLING PROPERTIES (cont'd):

Viscosity, (cps) @ 77°F (25°C) Brookfield:	
Part A	550
Part B	1,225
Mixed.....	1,050
Work Time (100-gram mass) @ 77°F (25°C).....	6 - 7 minutes
Gel Time	9 - 10 minutes
Demold Time @ 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).

STORAGE:

Store at room temperature in a dry place. Unopened containers will have a shelf life of 6 months from date of shipment when properly stored under normal conditions at 77°F (25°C).

NOTE:

F-50 part B, in liquid form, will darken with age. Opened containers of material should be purged with dry nitrogen prior to replacing lids or caps to prevent moisture contamination. 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.**

PACKAGING:

1 Gallon kits.....	4 lbs. A, 8 lbs. B
5 Gallon kits.....	20 lbs. A, 40 lbs. B
55 Gallon kits.....	200 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."