



ST-3050 A/B

50 SHORE A POLYURETHANE ELASTOMER

PRODUCT HIGHLIGHTS:

ST-3050 is a multi-purpose elastomer system that can perform many functions. Product characteristics are:

- ✓ Cures at room temperature to produce a strong, resilient elastomer
- ✓ Easy to use
- ✓ Exudate and volatile free.
- ✓ Maintains a dry, tack free surface after cure

PHYSICAL PROPERTIES:

Hardness, Shore A, ASTM D-2240	50 ± 2
Density, (g/cc) ASTM D-792.....	1.07
Cubic Inches per Pound	26.2
Color/Appearance.....	translucent light yellow
Tensile Strength, (psi) ASTM D-412.....	>1,200*
Modulus @ 100% Elongation (psi) ASTM D-412	165
Modulus @ 200% Elongation (psi) ASTM D-412	245
Modulus @ 300% Elongation (psi) ASTM D-412	290
Elongation, (%) ASTM D-412.....	>1,400*
Tear strength, (pli) ASTM D-624	185
Shrinkage, (in/in) linear ASTM D-2566.....	0.006

*Note - Test specimens exceed travel distance of testing equipment.

HANDLING PROPERTIES:

Mix Ratio (by weight):

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

Mix Ratio (by volume):

Part A	100 parts by volume
Part B	50 parts by volume

Specific Gravity:

Part A	1.05
Part B	1.08

Viscosity (cps) @ 77°F (25°C) Brookfield:

Part A	3,700
Part B	450
Mixed.....	2,600

Color:

Part A	light yellow
Part B	yellow*

Work Time, 100g mass @ 77°F (25°C)

Gel Time

Demold Time @ 77°F (25°C).....

*Note - Part B darkens with time, upon exposure to air.

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).

MOLD PREPARATION AND RELEASING:

When ST-3050 A/B is used to reproduce molds 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.

NOTE:

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 of ST-3050 A/B will have a shelf life of 6 months from date of shipment when properly stored under normal indoor conditions, i.e., 77° ± 15° F (25° ± 10° C). Open containers of material should be purged with dry nitrogen prior to replacing lids or caps to prevent moisture contamination.

PACKAGING:

1 Gallon kits.....	8 lbs. A, 4 lbs. B
5 Gallon kits.....	40 lbs. A, 20 lbs. B
55-Gallon drum kits.....	400 lbs. A, 200 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.