



# LS-40 A/B

## 40 SHORE A

### POLYURETHANE ELASTOMER

#### **PRODUCT HIGHLIGHTS:**

- Easy to use
- Room temperature mixing and curing
- Contains no MOCA, MDA, or MDI
- Excellent hydrolytic stability

#### **PRODUCT DESCRIPTION:**

LS-40 A/B has been developed to provide a 40 Shore A elastomer that has good tensile strength with great elongation and excellent recovery. The LS-40 A/B system produces tough, durable products that are easily produced. Suitable for many applications.

#### **TYPICAL PRODUCT USES:**

- ◆ Molds for plaster and concrete
- ◆ Mold for epoxy, polyurethane and polyester castings or laminates
- ◆ Fabricating parts ranging from protective shipping pads to skins for creatures

#### **PHYSICAL PROPERTIES:**

Hardness, Shore A ASTM D-2240.....	40 ± 2
Density, (g/cc) ASTM D-792.....	1.03
Cubic Inches Per Pound.....	27
Color/Appearance.....	Yellow, transparent
Tensile Strength, (psi) ASTM D-412.....	490
Elongation, (%) ASTM D-412.....	800
Tear Strength, (pli) ASTM D-624.....	85
Shrinkage, (in./in.) linear ASTM D-2566.....	0.009

#### **HANDLING PROPERTIES:**

Mix Ratio (by weight):

Part A.....	90 parts by weight
Part B.....	100 parts by weight

Mix Ratio (by volume):

Part A.....	86 parts by volume
Part B.....	100 parts by volume

Specific Gravity:

Part A.....	1.05
Part B.....	1.00

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

Part A.....	3,700
Part B.....	150
Mixed.....	700

**HANDLING PROPERTIES (continued):**

Work Time, 100g mass @ 77°F (25°C) .....	30 minutes
Gel Time .....	45 minutes
Demold Time @ 77°F (25°C).....	12 to 16 hours (see NOTE)
Cure Schedule.....	Full cure in 5-7 days

**MIXING:**

Mix thoroughly being sure to scrape sides and corners of containers so no unmixed material remains. Vacuum degassing is important to achieving an air free product. To aid the evacuation of air the use of a surface tension reducing agent (BJB product AF-4) is necessary. Refer to BJB polyurethane handling guide and data on AF-4 for additional information.

**MOLD PREPARATION AND RELEASING:**

When LS-40 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:**

Demold times can be reduced by either pre-heating A and B materials or post-curing. Post-curing is most effective at 150°F (66°C). 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 place. Shelf life is 6 months from date of shipment in unopened containers. Opened containers of material should be purged with dry nitrogen, or an equivalent product, prior to replacing lids or caps to prevent moisture contamination.

**PACKAGING:**

1 Gallon kits.....	7.2 lbs. A, 8 lbs. B
5 Gallon kits.....	36 lbs. A, 40 lbs. B
55-Gallon drum kits.....	360 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.**