



MD-50 REV 1 A/B
50 SHORE D POLYURETHANE ELASTOMER



BJB's MD Series of semi rigid, medium work time urethane elastomers exhibit great flexibility and excellent durability. These tough, abrasion resistant systems easily process at room temperature. The MD Series is perfect for larger or more complex parts and offers superior performance in many applications such as rollers, foundry tooling and high impact semi rigid parts. For faster work times consider BJB's FD Series of elastomers.

- RoHS/REACH compliant
• Molds and cast parts
• 2:1 user friendly ratio
• Cures at room temperature
• High tensile and tear strength

Table with 3 columns: PHYSICAL PROPERTIES, TEST METHOD, and ELEVATED TEMPERATURE CURE*. Rows include Hardness, Density, Cubic Inches per Pound, Color/Appearance, Tensile Strength, Tensile Modulus, Elongation, Tear Strength, Shrinkage, Izod Impact, Dielectric Constant, and Dissipation Factor.

*Note: Reported physical properties are based on test specimens cured 1-3 hours at room temperature then 16 hours at 160°F (71°C).

†Shrink test specimens are cured for 24 hours at room temperature and then 16 hours at 160°F (71°C).

Table with 3 columns: HANDLING PROPERTIES, Part A, and Part B. Rows include Mix Ratio by weight, Mix Ratio by volume, Specific Gravity, Color, Viscosity, Mixed Viscosity, Work Time, Gel Time, and Demold Time.

Properties above are typical and not for specifications.

NOTE:

Cure times are subject to part size. Smaller parts may need additional time in the mold or add mild heat (100-120°F) to decrease demold time. **Heat will also increase toughness of parts upon demold.**

Prolonged direct exposure to sunlight can affect the surface of this product. Cover molds or other products when storing outdoors

CURE SCHEDULE/HEAT CURING:

Most of the physical properties can be achieved in 5-7 days at 77°F (25°C). You may use your own post-cure schedule but the physical properties may vary from BJB's cure schedule of 1-3 hours at 77°F (25°C) followed by 16 hours at 160°F (71°C). Do not exceed curing temperature of 200°F (93°C).

PREPARATION AND RELEASING:

When MD-50 REV 1 A/B is used to produce molds or parts 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.

ACCESSORIES:

BJB offers silicone RTV mold making materials along with a wide range of accessory items. These include de-airing agents, pigments, mold releases, and Jiffy® Mixers. Visit BJB's website at www.bjbenterprises.com or consult a BJB representative for more information.

STORAGE:

Store ambient temperatures, 65-80°F (18-27°C). Unopened containers will have a shelf life of 6 months from date of shipment when properly stored at recommended temperatures. Purge opened containers with dry nitrogen before re-sealing.

PACKAGING	Part A	Part B	Cubic Inches per Kit
Quart Kits	2 lbs.	1 lb.	75
Gallon Kits	8 lbs.	4 lbs.	301
5-Gallon Kits	40 lbs.	20 lbs.	1,506

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 laundry 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.

⚠️WARNING: This product can expose you to chemicals including Toluene diisocyanate, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.



Handling Guide

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."