TC-9445 A/B

CASTABLE HIGH PERFORMANCE 45 SHORE D POLYURETHANE ELASTOMER

TC-9445 A/B is a two-component urethane casting compound that is specifically formulated for high abrasion and impact resistance. It is recommended for use in the casting of highly wear-resistant parts and linings. This product is a safe, easy-to-handle, room temperature mixing and curing system that does not contain TDI, MDI, MDA, or MOCA. TC-9445 A/B is relatively insensitive to typical environmental moisture and will make good void-free parts. Because of this product's exceptional toughness and abrasion resistance, castings made with TC-9445 A/B are particularly suitable for mining and mineral process industries.

- High impact resistance
- Exceptionally tough, abrasion resistant
- Room temperature mixing and curing
- Low viscosity
- Easy to handle

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULTS
Hardness, Shore D	ASTM D2240-04e1	45 ± 5
Density (g/cc)	ASTM D792-00	1.10
Cubic Inches per Pound	N/A	25.8
Color/Appearance	Visual	Transparent Amber
Tensile Strength (psi)	ASTM D412-98a(2002)e1	2,803
Tensile Modulus (psi)	ASTM D412-98a(2002)e1	1.83×10^4
Elongation (%)	ASTM D412-98a(2002)e1	350
Tear Strength (psi)	ASTM D624-00e1	297
Shrinkage (in/in) linear	ASTM D2566	0.0015†
Dielectric Constant, 1 MHz	ASTM D150-87	4.4
Dissipation Factor, 1 MHz	ASTM D150-87	0.0374

***Note:** Reported physical properties are based on test specimens cured 24 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).

HANDLING PROPERTIES	Part A	Part B
Mix Ratio (by weight)	96	100
Mix Ratio (by volume)	100	100
Specific Gravity @77°F (25°C)	1.05	1.10
Color	Colorless	Amber
Viscosity (cps) @ 77°F (25°C) Brookfield	6,640	125
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	1,265	
Work Time, 100g mass @ 77°F (25°C)	25 minutes	
Gel Time	40 minutes	
Demold Time @ 77°F (25°C)	6 – 8 hours	

Properties above are typical and not for specifications.

For more information call BJB Enterprises, Inc. (714) 734-8450 Fax (714) 734-8929
www.bjbenterprises.com

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 24 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).

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 at 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
Gallon Kits	7.7 lbs.	8 lbs.	405
5-Gallon Kits	38.4 lbs.	40 lbs.	2,023

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.

⚠**WARNING:** This product can expose you to chemicals including Butyl benzyl phthalate, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

Handling Guide

TC-9445 Part A SDS

TC-9445 Part B SDS

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