

TC-1630 A/B ULTRACAST II



TC-1630 A/B Ultracast is a very hard, tough, fast setting filled polyurethane casting resin system which is ideal for a wide range of casting jobs such as pattern duplication, vacuum forming tools, tracing tools, foundry core boxes, wax casting molds, and general casting molds.

PRODUCT HIGHLIGHTS:

- Foam Latex Molds
- Low Shrinkage, Low Exotherm
- Excellent Detail Reproduction
- Excellent Heat Resistance
- Short Demold Time
- Low Viscosity

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULTS
Hardness, Shore D	ASTM D2240	84 ± 2
Density (g/cc)	ASTM D792	1.80
Cubic Inches per Pound	N/A	16.5
Color/Appearance	Visual	Gray/Opaque
Flexural Strength (psi)	ASTM D790	6,221
Compressive Strength (psi)	ASTM D695	8,400
Shrinkage (in/in) linear	ASTM D2566 @ 1" depth	0.002
Heat Deflection Temperature @ 66psi	ASTM D648-04	211°F (99.4°C)
Heat Deflection Temperature @ 264psi	ASTM D648-04	190°F (87.8°C)

HANDLING PROPERTIES	Part A	Part B
Mix Ratio (by weight)	100	100
Mix Ratio (by volume)	93	100
Specific Gravity	1.73	1.60
Color	Black	White
Viscosity (cps) @ 77°F (25°C) Brookfield	900	1,300
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	1,100	
Work Time, 100g mass @ 77°F (25°C)	5 – 6 minutes	
Gel Time	7 – 8 minutes	
Demold Time @ 77°F (25°C)	1 hour	

Properties above are typical and not for specifications.

TC-1630 A/B can usually be used an hour or two after casting, even in thin sections of 1/4" or less. It also may be cast very thick (8-10" or more) without creating excessive exotherm. Thick sections (e.g. over 4 inches) can generate somewhat increased shrinkage. To avoid this problem, casting around a displacement core or stage pouring is recommended.

TC-1630 A/B can be cast into all dry mold materials such as metal, plastic, urethane, RTV, sealed wood or plaster. Plaster molds should be sealed with an appropriate sealer, followed by two coats of a paste wax such as PartAll High Temp Mold Release Wax.

MIXING INSTRUCTIONS:

TC-1630 A/B settles on standing but is easily remixed. Thoroughly mix cans A and B separately, preferably with a Jiffy Mixer. Then combine equal parts of A and B by weight. Mix thoroughly for not more than 30 seconds and pour promptly. Do not mix in the original containers. Polyethylene mixing pails are excellent and may be reused. Be sure all material on the sides and bottom are well mixed. After each use, cans should be purged with dry nitrogen and tightly sealed to prevent moisture in the air from reacting with the contents.

CAUTION:

Platinum cure silicone rubbers will not cure against the TC-1630 A/B. For further information, contact BJB's technical staff for recommended products and procedures.

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 3 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	10 lbs.	10 lbs.	330

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.



Handling Guide



TC-1630 Part A SDS



TC-1630 Part B SDS