

TC-1630 A/B
ULTRACAST II



TC-1630 is very hard, tough, fast setting filled 2-part polyurethane casting resin system which is ideal for: Foam Latex Molds, Vacuum Forming Tools, Silicone Prosthetic Molds, Industrial Molds, Rigid Parts, Composite Tools, and much more! TC-1630 is unique because it exhibits very low shrinkage when cast in mass, yet still cures quickly for producing molds and parts in a production setting. Its unique formulation also allows it to be cast into alginate life-cast molds without reaction to the presence of moisture.

- Economical
- Low Shrinkage / Low Exotherm
- Fast Cure Time
- Excellent Detail Reproduction
- Low Moisture Sensitivity
- Works Well with BJB Platinum Silicones*

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULTS
Hardness, Shore D	ASTM D2240	82 ± 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.

***NOTE:**

BJB has tested our Platinum Silicones with great results but due to the temperamental nature of some Platinum Silicone materials, a small test is recommended when trying unknown systems. Be sure molds are sufficiently cured and wash new molds with warm soap and water for best results. Contact BJB's technical staff if processing advice or cured samples are needed.

MIXING AND CASTING NOTES:

TC-1630 A/B is a filled system and will settle in storage. Thoroughly pre-mix A and B separately (preferably with a Jiffy Mixer) before measuring out equal parts of A and B by weight. Thoroughly mix with a flat, wide mixing spatula or drill mix with a Jiffy Mixer, being sure material on the sides and bottom are well mixed. After each use, remaining material in the cans should be purged with dry nitrogen and tightly sealed before storage to help preserve shelf life.

TC-1630 A/B can typically be demolded and handled an hour or two after casting. It may also be cast very thick (8-10" or more) without creating excessive exotherm, though thicker sections (e.g. over 4 inches) can generate increased shrinkage. To avoid this problem, casting around a displacement core or stage pouring is recommended.

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.

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



Handling Guide



TC-1630 Part A SDS



TC-1630 Part B SDS

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."