



TC-865 A/B

65 SHORE D POLYURETHANE CASTING SYSTEM



TC-865 A/B is a medium viscosity, economical and easy to handle two component urethane compound. This system cures relatively fast at room temperature producing tough, impact resistant castings.

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULTS
Hardness, Shore D	ASTM D2240	65 ± 2
Density (g/cc)	ASTM D792	1.15
Cubic Inches per Pound	N/A	24
Color/Appearance	Visual	Cream / Opaque
Tensile Strength (psi)	ASTM D412	2,475
Tensile Modulus (psi)	ASTM D412	99,000
Elongation (%)	ASTM D412	70
Flexural Strength (psi)	ASTM D790	2,875
Flexural Modulus (psi)	ASTM D790	92,850
Tear Strength (pli)	ASTM D624	585
Shrinkage (in/in) linear	12"x1/2"x1/2"	0.005
Izod Impact (ft-lb/in) notched	ASTM D256	0.85

HANDLING PROPERTIES	Part A	Part B
Mix Ratio by weight	100	100
Mix Ratio by volume	100	95
Specific Gravity @ 77°F (25°C)	1.13	1.18
Color	Pale Yellow	Cream
Viscosity (cps) @ 77°F (25°C) Brookfield	1,350	1,500
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	1,400	
Work Time, 100g mass @ 77°F (25°C)	9 – 11 minutes	
Gel Time	12 – 15 minutes	
Demold Time @ 77°F (25°C)	2 – 3 hours	

Properties above are typical and not for specifications.

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 180°F (82°C). Do not exceed curing temperature of 200°F (93°C).

PIGMENTING:

TC-865 A/B naturally produces light cream colored parts, but may be easily tinted to any color from light pastels to deep tones using BJB’s 6800 Series pigments. The 6800 Series pigments are dispersions which can be used to a maximum of 2% to the total weight of the TC-865 A/B. Dry pigments, such as fluorescent colors, may also be used. Recommended levels of dry pigments are 5 - 10% to the total weight of the TC-865 A/B system.

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
Gallon Kits	8 lbs.	8 lbs.	384
5-Gallon Kits	40 lbs.	40 lbs.	1,920
55-Gallon Drum Kits	400 lbs.	400 lbs.	19,200

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 N-Methylpyrrolidone and Naphthalene, 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

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."