TC-873 REV 1 A/B

RIGID 70 SHORE D POLYURETHANE CASTING SYSTEM

RoHS

TC-873 REV 1 A/B is an easy to pigment, translucent 70D polyurethane with a 2.5-minute work time and fast demold time. This tough high impact polypropylene-like product is user friendly with a quick demold.

- RoHS/REACH Compliant
- High Impact
- Translucent, Easy to Color
- Similar to Polypropylene
- Low Viscosity
- Mercury/Phthalate Free

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Hardness, Shore D	ASTM D2240-04e1	70 ± 5
Density (g/cc)	ASTM D792-00	1.151
Cubic Inches per Pound	N/A	25.06
Color/Appearance	Visual	Translucent Pale Yellow
Tensile Strength (psi)	ASTM D638-03	3,000
Tensile Modulus (psi)	ASTM D638-03	83,000
Elongation (%)	ASTM D638-03	20
Flexural Strength (psi)	ASTM D790-03	3,600
Flexural Modulus (psi)	ASTM D790-03	94,000
Shrinkage (in/in) linear	12"x ½" x ½"	0.0052
Izod Impact, notched (ft-lb/in)	ASTM D256-05	1.4
Izod Impact, unnotched (ft-lb/in)	ASTM D256-05	>16
Heat Deflection Temperature @ 66 psi	ASTM D648-04	151°F (66.1°C)
Heat Deflection Temperature @ 264 psi	ASTM D648-04	126°F (52.2°C)
Dielectric Constant, 1 MHz	ASTM D150-87	3.851
Dissipation Factor, 1 MHz	ASTM D150-87	0.0396

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

HANDLING PROPERTIES	Part A	Part B
Mix Ratio by weight	100	91
Mix Ratio by volume	100	100
Specific Gravity @ 77°F (25°C)	1.158	1.050
Color	Pale Yellow	Pale Yellow
Viscosity (cps) @ 77°F (25°C) Brookfield	450	1,300
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	700	
Work Time, 100g mass @ 77°F (25°C)	2.5 minutes	
Gel Time	3 minutes	
Demold Time @ 77°F (25°C)	20 – 30 minutes	

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

IMPORTANT MIXING DIRECTION:
It is important to remix the "B" component thoroughly prior to each use before combining with the "A" side.

CURE SCHEDULE:
Most of the physical properties can be achieved in 5-7 days at 77ºF (25ºC). You may use your own post-cure schedule but the physical properties may vary from BJB's cure schedule of 1-3 hours at 77ºF (25ºC) followed by 16 hours at 160 ºF (71ºC). Do not exceed curing temperatures of 200ºF (93ºC). Support of the part may be required to prevent part deformation during the heat curing process.

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, 65-80ºF (18-27ºC). 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.	1.82 lbs.	96
Gallon Kits	8 lbs.	7.28 lbs.	383
5-Gallon Kits	40 lbs.	36.4 lbs.	1,915
55-Gallon Drum Kits	440 lbs.	400.4 lbs.	21,060

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 is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

Handling Guide

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