TC-896 A/B

RIGID 82 SHORE D HIGH HEAT RESISTANT POLYURETHANE CASTING SYSTEM

RoHS

TC-896 A/B is a RoHS compliant, non-mercury based catalyst polyurethane system that produces a tough 82 shore D material. This system has an extremely high heat deflection temperature which in some cases can be post cured without having to use fixtures.

- High heat resistance
- RoHS/REACH compliant
- Non-mercury
- Working time of 7 minutes

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULTS
Hardness, Shore D	ASTM D2240-04e1	82 ± 2
Density (g/cc)	ASTM D792-00	1.2
Cubic Inches per Pound	N/A	24.3
Color/Appearance	Visual	Amber
Tensile Strength (psi)	ASTM D638-03	7,560
Tensile Modulus (psi)	ASTM D638-03	2.12×10^5
Elongation (%)	ASTM D638-03	60
Flexural Strength (psi)	ASTM D790-03	9,400
Flexural Modulus (psi)	ASTM D790-03	2.27×10^5
Shrinkage (in/in) linear	12”x ½” x ½”	0.004
Izod Impact, notched (ft-lb/in)	ASTM D256-05	1.04
Heat Deflection Temperature @ 66 psi	ASTM D648-04	240°F (115.6°C)
Heat Deflection Temperature @ 264 psi	ASTM D648-04	210°F (98.9°C)

Note: Reported physicals based on elevated temperature cured test specimens.

HANDLING PROPERTIES	Part A	Part B
Mix Ratio by weight	100	50
Mix Ratio by volume	100	50
Specific Gravity @ 77°F (25°C)	1.13	1.16
Color	Pale Yellow	Amber
Viscosity (cps) @ 77°F (25°C) Brookfield	2,100	650
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	1,475	
Work Time, 100g mass @ 77°F (25°C)	7 minutes	
Gel Time	8.5 minutes	
Demold Time @ 77°F (25°C)	6 – 8 hours	
Demold Time @ 150°F (65.5°C)	1 hour	

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 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 180 ºF (82ºC). Do not exceed curing temperatures of 200ºF (93ºC). Support of the part may be required to prevent part deformation during the heat curing process.

NOTE:
It is advisable whenever possible to evacuate entrapped air prior to casting this system. The use of a de-airing agent can speed up the process. BJB's AF-4 antifoam works best as the de-airing agent. In conjunction with these support products BJB offers pigments in a wide variety of colors and stainless steel mixers called "Jiffy Mixers". For additional information on the use of this product, refer to BJB Guidelines for Handling Polyurethane Products. If further information is required, please call BJB's technical staff for assistance.

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
Gallon Kits	8 lbs.	4 lbs.	292
5-Gallon Kits	40 lbs.	20 lbs.	1,458

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.

⚠**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.

NOTE:
Refer to the Safety Data Sheet before using this product. For processing tips and guides, please visit: learn.bjbmaterials.com to discover additional information.

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