HX-85D A/B

RIGID 85 SHORE D HIGH IMPACT POLYURETHANE CASTING SYSTEM

RoHS

HX-85D is a RoHS compliant, non-mercury-based catalyst polyurethane system that produces a tough 85 shore D material. This system has high impact value with high heat deflection temperature. HX-85D feels similar to ABS plastic.

- High Impact
- RoHS/REACH compliant
- Offers good UV resistance
- Working time of 6-6.5 minutes

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULTS
Hardness, Shore D	ASTM D2240-04e1	85 ± 5
Density (g/cc)	ASTM D792-00	1.17
Cubic Inches per Pound	N/A	24.1
Color/Appearance	Visual	Translucent White
Tensile Strength (psi)	ASTM D638-03	6,800
Tensile Modulus (psi)	ASTM D638-03	2.6×10^5
Elongation (%)	ASTM D638-03	22
Flexural Strength (psi)	ASTM D790-03	10,500
Flexural Modulus (psi)	ASTM D790-03	2.7×10^5
Shrinkage (in/in) linear	12"x ½" x ½"	0.002
Izod Impact, notched (ft-lb/in)	ASTM D256-05	1.85
Heat Deflection Temperature @ 66 psi	ASTM D648-04	170°F (77°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	53
Specific Gravity @ 77°F (25°C)	1.17	1.11
Color	Translucent Yellow	White
Viscosity (cps) @ 77°F (25°C) Brookfield	350	1,000
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	700	
Work Time, 100g mass @ 77°F (25°C)	6 – 6.5 minutes	
Gel Time	6.5 – 7 minutes	
Demold Time @ 77°F (25°C)	2 – 4 hours	
Demold Time @ 125°F (52°C)	1 – 2 hours	

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.

COLOR NOTE:

Thicker sections may develop a slight translucent white bloom due to increased cure exotherm, causing those areas to appear lighter. For pigmented parts, more uniform wall thickness will provide the most consistent color appearance.

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.

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.	289
5-Gallon Kits	40 lbs.	20 lbs.	1,446

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.

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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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."