

Advanced Materials

Epocast® 1636-A/B

EPOXY SYNTACTIC

- High Density
- High Temperature Potting Compound
- Self-Extinguishing

DESCRIPTION :

Epocast® 1636-A/B epoxy syntactic is a high-performance, two-part system with high strength and good high temperature resistance. The aluminum-filled, medium-viscosity epoxy compound is easy to handle and machines easily in the cured state. Epocast® 1636-A/B epoxy syntactic is used to reinforce honeycomb structures and is qualified to BMS 5-28, Type 6.

TYPICAL PROPERTIES AS RECEIVED :

<u>Property</u>	<u>1636-A Resin</u>	<u>1636-B Hardener</u>	<u>1636-A/B System</u>	<u>Test Method</u>
Color	Gray	Dk. Amber	Gray	Visual
Density, g/cc	1.73	1.07	1.72	ASTM-D-792
Viscosity, cP at 77°F (25°C)	38,000	1,000	29,000	ASTM-D-2196
Gel time, 50 gms at 77°F (25°C), minutes	--	--	120	ASTM-D-2471
Shelf life at 77°F (25°C), unopened, months	12	12	--	--

MIX RATIO :

To 100 parts by weight of Epocast® 1636-A resin, add 8 parts by weight of Epocast® 1636-B hardener. Stir both components thoroughly for several minutes until completely mixed. Mix carefully to minimize air entrapment.

CURE SCHEDULE :

7 days at 77°F (25°C), or gel at 77°F (25°C) and raise temperature approximately 5-7°F (3-4°C) per minute to 260°F (127°C), hold 90 minutes, or 350°F (177°C), hold 60 minutes.

TYPICAL CURED PROPERTIES (Not for specification purposes)

<u>Test</u>	<u>Result</u>	<u>Test Method</u>
Compressive strength, Ksi (MPa)		ASTM-D-695
7 days at 77°F (25°C)	15.0 (103)	--
Room temperature gel plus 1½ hours at 250°F (121°C)	28.0 (193)	--
Tested at 77°F after 14 days at 350°F (177°C)	28.0 (193)	--
Tested at 350°F after 14 days at 350°F (177°C)	5.0 (34.5)	--
Compressive modulus, Ksi (MPa)		
7 days at 77°F (25°C)	800 (5,517)	ASTM-D-695
Room temperature gel plus 1½ hours at 250°F (121°C)	600 (4,137)	--
Tested at 77°F after 14 days at 350°F (177°C)	500 (3,448)	--
Tested at 350°F after 14 days at 350°F (177°C)	40 (276)	--
Tensile lap shear, etched AL/AL, psi (MPa)	2,000 (13.8)	ASTM-D-1002
Flammability	self-extinguishing	BSS-7230-F4
Weight gain on immersion after 24 hours at 77°F (25°C), %		ASTM-D-543
TT-S-735, Type III test fluid	<0.1	--
Mil-M-5606, hydraulic fluid	<0.1	--
Skydrol hydraulic fluid	<0.1	--
Distilled water	<0.1	--

STORAGE/ SHELF LIFE : Syntactic epoxy resins and hardeners should be stored in a dry place in their original, sealed containers at temperatures from 60-90°F (16-32°C). Material temperatures should be above 65°F (18°C) when mixing. After use, tightly reseal containers. Frozen materials should be stored at 0°F (-18°C) or colder and allowed to thaw at room temperature before use.

Under these conditions, syntactic epoxy resins and hardeners will remain useable for 12 months from date of shipping from Huntsman.

CAUTION :

Huntsman Advanced Materials Americas Inc. maintains up-to-date Material Safety Data Sheets (MSDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Users should review the latest MSDS to determine possible health hazards and appropriate precautions to implement prior to using this material. Copies of the latest MSDS may be requested by calling our customer service group at 800-367-8793 or emailing your request to adhesives_group@huntsman.com.

FIRST AID !

Eyes and skin: Flush eyes with water for 15 minutes. Contact a physician if irritation persists. Wash skin thoroughly with soap and water. Remove and wash contaminated clothing before reuse.

Inhalation: Remove subject to fresh air.

Swallowing: Dilute by giving water to drink and contact a physician promptly. Never give anything to drink to an unconscious person.

KEEP OUT OF REACH OF CHILDREN

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