Huntsman Advanced Materials Americas Inc. Customer Service Hotline: 800.367.8793 5121 San Fernando Road West Los Angeles, CA 90039 818.247.6210

Customer Service Faxline: 517.351.6255 Technical Inquiries: 800.817.8260



website: www.araldite.com e-mail: adhesives_group@huntsman.com

Product Data

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

Property	1636-A	<u>1636-B</u>	1636-A/B	Test Method
	<u>Resin</u>	<u>Hardener</u>	<u>System</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 350F° (177°C), hold 60 minutes.

TYPICAL CURED PROPERTIES (Not for specification purposes)

<u>Test</u>	<u>Result</u>	Test Method
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	

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 <u>prior to</u> 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 <u>adhesives group@huntsman.com</u>.

FIRST AID!

<u>Eyes and skin:</u> 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.

<u>Swallowing:</u> 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

FOR PROFESSIONAL AND INDUSTRIAL USE ONLY

IMPORTANT LEGAL NOTICE:

Sales of a referenced product ("Product") are subject to the general terms and conditions of sale of Huntsman Advanced Materials Americas Inc. ("Huntsman").

<u>WARRANTY</u>: Huntsman warrants to the Buyer that the Product will conform to the published specifications for that Product at the time of manufacture, and that the Product will be free from defects in material and workmanship in normal use.

DISCLAIMER AND LIMITATION OF LIABILITY: EXCEPT AS SET FORTH ABOVE, SELLER MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Huntsman cannot control Buyer's application and use of the Product and accepts no responsibility therefore. No statement or recommendation contained in any Product literature may be construed as a representation about the suitability of a Product for the particular application of Buyer or user or as an inducement to infringe any relevant patent. Buyer is responsible to ensure that its intended use of the Product does not infringe any third-party's intellectual property rights. Huntsman neither assumes, nor authorizes any representative or other person to assume for it, any obligation or liability other than as is expressly set forth herein. UNDER NO CIRCUMSTANCES SHALL HUNTSMAN BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, SPECIAL OR OTHER INDIRECT DAMAGES AS A RESULT OF A BREACH OF ANY WARRANTY OR THE FAILURE OF A PRODUCT OR ANY CLAIM THAT IS ESSENTIALLY BASED UPON SUCH BREACH OR FAILURE. Any claim by Buyer, whether arising in contract, tort, negligence, breach of warranty, strict liability, or otherwise, related to a Product shall be limited to, and the sole liability of Huntsman and the sole remedy of Buyer for any claims shall be for, the purchase price of the Product in respect of which such claim is made. The foregoing DISCLAIMER AND LIMITATION OF LIABILITY supersedes Buyer's documents.

<u>WARNING</u>: Technical data and results are based upon tests under controlled laboratory conditions and must be confirmed by Buyer by testing for its intended conditions of use. The Product has not been tested for, and therefore is not recommended or suitable for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended or likely, or for uses for which implantation within the human body is intended, and Huntsman assumes no liability for any such uses.

© 2004 Huntsman Advanced Materials Americas Inc. Epocast is a registered trademark of Huntsman LLC or an affiliate thereof in one or more, but not all, countries.