

Advanced Materials**Epocast[®] 1633****EPOXY SYNTACTIC PRODUCTS**

Self-extinguishing
 Quick-setting
 Two-to-one mix ratio
 Available in four colors

DESCRIPTION :

Epocast[®] 1633 epoxy syntactic products are medium-density, bromine-free and halogen-free, self-extinguishing compounds designed for potting fasteners in honeycomb structures. The epoxy syntactics are easily extruded through 1/8 in. (3mm) nozzle orifice, but are non-flowing after application. The products are easy to handle in isolated repair areas because the syntactic pastes are available in dual-barrel cartridges. Epocast[®] 1633 epoxy syntactic products set quickly at room temperature. The epoxy syntactics are qualified to BMS 5-28, Type 18, Class 2 and AIMS 08-08-001-04. Epocast[®] 1633 epoxy syntactics are available in four colors:

- Epocast[®] 1633-A/B -- Light Blue
- Epocast[®] 1633-A50/B – Orange
- Epocast[®] 1633-A40/B – Black
- Epocast[®] 1633-A41/B – Gray

TYPICAL PROPERTIES AS RECEIVED :

<u>Property</u>	<u>1633 Resins</u>	<u>1633 Hardener</u>	<u>1633 Systems</u>	<u>Test Method</u>
Density, g/cc	0.68	0.66	0.73	ASTM-D-792
Viscosity at 77°F (25°C)	Soft-paste	Soft-paste	Paste	ASTM-D-2196
Work life, 10 grams at 77°F (25°C), minutes	--	--	2-5	ASTM-D-1338
Shelf life at 77± 15°F (25°C ± 8°C), unopened, months	12	12	--	--

MIX RATIO :

To 100 parts by weight of Epocast[®] 1633 resin, add 50 parts by weight of Epocast[®] 1633 hardener. Mix both components thoroughly for 1 minute to assure complete blending.

CURE SCHEDULE :

Gel at room temperature plus 5 hours at 120°F (49°C) or gel at room temperature plus 2 hours at 150°F (66°C) or 3 days at room temperature.

TYPICAL CURED PROPERTIES (Not for specification purposes)

<u>Test</u>	<u>Result</u>	<u>Test Method</u>
Compressive strength, at 77°F (25°C), psi (MPa)	6,500 (44.8)	ASTM-D-695
Compressive modulus, Ksi (MPa)	270 (1,862)	ASTM-D-695
Tensile lap shear, chromic acid etched al/al, psi (MPa)	1,400 (9.6)	ASTM-D-1002
Percent weight gain, 24 hours immersion at 77°F (25°C)		ASTM-D-570
TTS-735, Type III test fluid	0.3	--
Mil-M-5606 hydraulic fluid	0.4	--
Skydrol 500-A	0.7	--
Distilled water	2.5	--

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

FOR PROFESSIONAL AND INDUSTRIAL USE ONLY

IMPORTANT LEGAL NOTICE

Sales of the product described herein ("Product") are subject to the general terms and conditions of sale of either Huntsman Advanced Materials LLC, or its appropriate affiliate including without limitation Huntsman Advanced Materials (Europe) BVBA, Huntsman Advanced Materials Americas Inc., or Huntsman Advanced Materials (Hong Kong) Ltd. ("Huntsman"). The following supercedes Buyer's documents.

Huntsman warrants that at the time and place of delivery all Products sold to Buyer shall conform to the specifications provided to Buyer by Huntsman.

While the information and recommendations included in this publication are, to the best of Huntsman's knowledge, accurate as of the date of publication, NOTHING CONTAINED HEREIN (EXCEPT AS SET FORTH ABOVE REGARDING CONFORMANCE WITH SPECIFICATIONS PROVIDED TO BUYER BY HUNTSMAN) IS TO BE CONSTRUED AS A REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHTS, OR WARRANTIES AS TO QUALITY OR CORRESPONDENCE WITH PRIOR DESCRIPTION OR SAMPLE, AND THE BUYER ASSUMES ALL RISK AND LIABILITY WHATSOEVER RESULTING FROM THE USE OF SUCH PRODUCT, WHETHER USED SINGLY OR IN COMBINATION WITH OTHER SUBSTANCES.

No statements or recommendations made herein are to be construed as a representation about the suitability of any Product for the particular application of Buyer or user or as an inducement to infringe any patent or other intellectual property right. Buyer is responsible to determine the applicability of such information and recommendations and the suitability of any Product for its own particular purpose, and to ensure that its intended use of the Product does not infringe any intellectual property rights.

The Product may be or become hazardous. The Buyer should obtain Material Safety Data Sheets and Technical Data Sheets from Huntsman containing detailed information on Product hazards and toxicity, Epocast® 1633 Products

together with proper shipping, handling and storage procedures for the Product, and should comply with all applicable governmental laws, regulations and standards relating to the handling, use, storage, distribution and disposal of, and exposure to the Product. Buyer shall also take all steps necessary to adequately inform, warn and familiarize its employees, agents, direct and indirect customers and contractors who may handle or be exposed to the Product of all hazards pertaining to and proper procedures for safe handling, use, storage, transportation and disposal of and exposure to the Product, and the containers or equipment in which the Product may be handled, shipped or stored.

Epocast is a registered trademark of Huntsman LLC or an affiliate thereof in one or more countries, but not all countries.

© 2006 Huntsman Advanced Materials Americas Inc.

Main Offices :

Huntsman Corporation
10003 Woodloch Forest Dr.
The Woodlands
Texas 77380
(281) 719-6000

**Huntsman Advanced Technology
Center**
8600 Gosling Rd.
The Woodlands
Texas 77381
(281) 719-7400