

## **Advanced Materials**

# Epocast® 1636-A/B



## **EPOXY SYNTACTIC**

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

### **DESCRIPTION:**

Epocast<sup>®</sup> 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<sup>®</sup> 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</u>	<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

## **MIX RATIO:**

To 100 parts by weight of Epocast<sup>®</sup> 1636-A resin, add 8 parts by weight of Epocast<sup>®</sup> 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>	Result	<b>Test Method</b>			
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:

Epocast<sup>®</sup> 1636-A/B should be stored in a dry place, in the sealed original container, at temperatures between +2°C and +40°C (+35.6°F and 104°F). The product should not be exposed to direct sunlight. Under these storage conditions, and when supplied under Huntsman standard certification, this product has a shelf life of 1 year (expiration date may differ based on customer specification).

Material temperatures should be above 18°C (65°F) when mixing. After use, tightly reseal containers.

## PRECAUTIONARY STATEMENT

Huntsman Advanced Materials Americas LLC 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.

#### First Aid!

Refer to MSDS as mentioned above.

**KEEP OUT OF REACH OF CHILDREN** 

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