

**Advanced Materials****EPOCAST<sup>®</sup> 1635-A/B****SYNTACTIC COMPOUND FOR REFILLING MIS-DRILLED HOLES****Description**

Epocast<sup>®</sup> 1635-A/B syntactic compound is a two-component, high-performance material designed for refilling mis-drilled holes in composite parts. This aluminum filled, high-viscosity system exhibits outstanding compressive strength and dynamic fatigue resistance under load at elevated temperature. This product is qualified to BMS 5-28, Type 31.

**Features**

Performs at temperatures of up to 350°F (177°C)  
High strength  
Fatigue resistant

**Typical Properties** (as received)

<u>Property</u>	<u>Test Values</u>			<u>Test Method</u>
	<u>1635-A Resin</u>	<u>1635-B Hardener</u>	<u>1635-A/B System</u>	
Color	Blue-gray	Amber-gray	Blue-gray	Visual
Density, g/cc	1.8	1.7	1.8	ASTM-D-1622
Viscosity, cP at 77°F (25°C)	>300,000	>50,000	>100,000	ASTM-D-2196
Gel time, 100 gms at 77°F (25°C), min.	--	--	>60	ASTM-D-2471
Extrusion, 80 psig at 77°F (25°C), g/min.	--	--	>90	BMS 5-28
Shelf life at 77°F (25°C), unopened, months	6	6	--	
Shelf life at 40°F (4°C), unopened, months	12	12	--	

**Mix Ratio**

To 100 parts by weight of Epocast<sup>®</sup> 1635-A, add 23 parts by weight of Epocast<sup>®</sup> 1635-B (4:1 A to B by volume). Mix both components thoroughly for 3-5 minutes to assure complete dispersion or use 4:1 dual-barrel cartridge, with 6-inch, 20-element mixing nozzle, to dispense.

**Cure Schedule**

Seven days at 77°F (25°C) or gel at 77°F (25°C) and cure 150 minutes at 200°F (93°C).

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**Typical Cured Properties** (Not for specification purposes)

<b>Property</b>	<b>Result</b>	<b>Test Method</b>
Tensile lap shear (etched Al/Al): Test at 77°F (25°C) after 7days @ 77°F (25°C) or 2.5 hours @ 200°F (93°C), Ksi	1.5	ASTM-D-1002
Compressive strength: Test at 77°F (25°C) after 7days @ 77°F (25°C), Ksi	15	ASTM-D-695
Test at 350°F (177°C) after 7 days @ 77°F (25°C), Ksi	12	--
Test at 77°F (25°C) after 2.5 hours @ 200°F (93°C), Ksi	25	--
Test at 350°F (177°C) after 2.5 hours @ 200°F (93°C), Ksi	12	--
% Fluid Weight Gain [DI water, BMS 3-11 Ty IV Cl 1 Gr A hydraulic (Skydrol 500B), MIL-PRF-5606 hydraulic, TT-S-735 Ty III ref fuel]	<1.0	ASTM-D-543-87

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**Packaging and Shipping**

Epocast<sup>®</sup> 1635-A resin is a nonrestricted article. Epocast<sup>®</sup> 1635-B hardener is a corrosive paste.

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**Storage**

Epocast<sup>®</sup> 1635-A/B should be stored in a dry place, in the sealed original container, at temperatures between +5°C and +25°C (+41°F and 77°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).

Store with adequate ventilation, away from excessive heat, sources of ignition and reactive materials. Do NOT store near food or feed. CORROSIVE to copper and brass during long-term storage.

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**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 prior to using this material.

**First Aid!**

Refer to MSDS as mentioned above.

**KEEP OUT OF REACH OF CHILDREN**

**FOR PROFESSIONAL AND INDUSTRIAL USE ONLY**

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