

**Advanced Materials****Epocast<sup>®</sup> 1671-A/B****EPOXY SYNTACTIC**

- Quick Setting
- Self-Leveling
- Self Extinguishing

**DESCRIPTION :**

Epocast<sup>®</sup> 1671-A/B epoxy syntactic is a semi-paste compound designed for potting fasteners in honeycomb structures. The material is easy to extrude through 1/8-in. (3mm) nozzle orifice, but is self-leveling after application. Epocast<sup>®</sup> 1671-A/B epoxy syntactic sets quickly at room temperature and develops excellent flame resistance meeting the requirements of FAR 25.853B in most composite assemblies.

**TYPICAL PROPERTIES AS RECEIVED :**

<u>Property</u>	<u>1671-A Resin</u>	<u>1671-B Hardener</u>	<u>1671-A/B System</u>	<u>Test Method</u>
Color	Off-white	Amber	Off-white	Visual
Density, g/cc.	0.61	0.97	0.70	ASTM-1622
Viscosity, cP at 77°F (25°C)	Semi-paste	1,500	Semi-paste	ASTM-D-2196
Gel time, 50 gms at 77°F (25°C), minutes	--	--	12 -20	ASTM-D-2471
Shelf life at 77°F (25°C), unopened, months	12	12	--	
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**MIX RATIO :**

To 100 parts by weight of Epocast<sup>®</sup> 1671-A resin, add 13 parts by weight of Epocast<sup>®</sup> 1671-B hardener. Mix both components thoroughly for several minutes to assure complete blending.

**CURE SCHEDULE :**

24 hours at 77°F (25°C) or gel at room temperature plus five hours at 125°F (52°C).

**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)	7,000 (48)	ASTM-D-695
Compressive modulus at 77°F (25°C), Ksi (MPa)	250 (1,725)	ASTM-D-695
Tensile lap shear, chromic acid etched aluminum, at 77°F (25°C), psi (MPa)	1,000 (7)	ASTM-D-1002
Weight change, 24 hours immersion at 77°F (25°C), %		ASTM-D-543
Mil-S-3136, Type III test fluid	+0.1	
Mil-M-5606 hydraulic fluid	+1.0	
Skydrol 500A	+1.0	
Distilled water	+1.5	
Flammability, 60 second ignition, self-extinguishing, seconds	<5.0	FAR 25.853B
burn length, inches	<4.0	
Heat Release (neat material only)	51/13	O.S.U.
Smoke Density (neat material only) D <sub>8</sub>	104	N.B.S.

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**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.

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**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](mailto: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**

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