

**Advanced Materials****Epocast<sup>®</sup> 927****EPOXY SYNTACTIC**

- One Part, Structural Compound
- High Compressive Strength
- 24 Hour Work Life

**DESCRIPTION :**

Epocast<sup>®</sup> 927 epoxy syntactic is a frozen, one-component, structural material for reinforcing honeycomb parts that is self-extinguishing and maintains high compressive strength at temperatures up to 400°F (204°C). When thawed, the epoxy syntactic can be extruded from cartridges as a thixotropic paste. Epocast<sup>®</sup> 927 epoxy syntactic is qualified to BMS 5-28, Type 12, Class 1, among other specifications.

**TYPICAL PROPERTIES AS RECEIVED :**

<u>Property</u>	<u>Result</u>	<u>Test Method</u>
Color	Off-white	Visual
Density, g/cc	1.22	ASTM-D-1622
Extrudability, g/min. at 77°F (25°C)	1500	BMS 5-28
Work life, at 77°F (25°C), after thaw, hours	24	ASTM-D-1338
Shelf life at 0°F (-18°C), unopened, days	90	--

**CURE SCHEDULE :**

Heat the material from room temperature at the rate of 5-7°F (3-4°C) per minute, plus 1 hour at 350°F (177°C) or 90 minutes at 250°F (121°C). Cure temperature refers to temperature of material determined by thermocouple. (Slow heat rise to 5-7°F (3-4°C) preferred to reduce shrinkage and minimize out-gassing during cure).

**HANDLING CHARACTERISTICS :**

Extrusion rate varies with thawing method and length of time after thaw. Adjust thawing technique to suit the application. Allow to thaw at room temperature, or cartridges may be thawed in a microwave oven at low power setting, OR thaw 15-30 minutes in a 180°F (83°C) water bath. This will bring material temperature to 120-125°F (49-52°C). Apply with an air-operated sealant gun without a nozzle.

**TYPICAL CURED PROPERTIES (Not for specification purposes)**

<u>Test</u>	<u>Result</u>	<u>Test Method</u>
Ultimate compressive strength, Ksi (MPa)		
at 77°F (25°C)	22.0 (152)	ASTM-D-695
at 350°F (177°C)	13.0 (89.6)	--
at 400°F (204°C)	10.0 (68.9)	--
at 77°F after 500 hrs. at 350°F (177°C)	20.0 (138)	--
at 350°F after 500 hrs. at 350°F (177°C)	14.0 (96.5)	--
Flammability, horizontal	self-extinguishing	--

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**STORAGE/  
SHELF LIFE :** Syntactic epoxy materials should be stored in their original, sealed containers at 0°F (-18°C) or colder and allowed to thaw at room temperature before use.

Under these conditions, syntactic epoxy materials will remain useable for 90 days 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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