

Advanced Materials**Epocast[®] 1627****EPOXY SYNTACTIC**

- Core Reinforcing Compound
- High Compressive Strength

DESCRIPTION :

Epocast[®] 1627 epoxy syntactic is a filled, high-performance, structural core-reinforcing compound with an extremely low coefficient of thermal expansion, making the material suitable for use in fabricating and reinforcing composite structures. The epoxy syntactic is supplied ready to use (after thawing) as a gray-colored, frozen, 32- or 64-cubic inch (524 or 1,049 cm³) patty which does not require any weighing or mixing. Epocast[®] 1627 epoxy syntactic is qualified to BMS 5-28, Type 27.

TYPICAL PROPERTIES AS RECEIVED :

<u>Property</u>	<u>Result</u>	<u>Test Method</u>
Color	Gray	Visual
Density, g/cc	1.8	ASTM-D-1622
Extrudability, g/minute @77°F (25°C)	1000	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, months	3	--
at -40°F (-40°C)	6	--

- * Allow blocks to remain sealed in original plastic bag (to prevent surface moisture condensate) and thaw for 1½ to 2 hours at room temperature then remove from package and apply to desired surface. Uncured blocks may be used for up to 48 hours after thawing as long as they are protected from surface moisture. If refrozen, work life will be reduced accordingly.

SUGGESTED CURE SCHEDULES :

#1 - 1 hour at 350°F (177°C)** #2 - 6 hours at 250°F (121°C)** #3 - 4 days at 180°F (83°C)**

** Each cure cycle must include 5-7°F (3-4°C) per minute heat rise from room temperature to cure temperature, holding at cure temperature for designated time, followed by 5-7°F (3-4°C) per minute heat reduction to 150°F (66°C) or below. Cure temperature refers to temperature of material as determined by thermocouple.

TYPICAL CURED PROPERTIES (Not for specification purposes)

<u>Test</u>	<u>Results</u>	<u>Test Method</u>
Compressive strength at 77°F (25°C), Ksi (MPa)	30.0 (207)	ASTM-D-695
Compressive modulus at 77°F (25°C), Ksi (MPa)	190 (1310)	--
Shrinkage, in/in	0.002	ASTM-D-696
Coefficient of thermal expansion, in/in/°F (in/in/°C)	11.2x10 ⁻⁶ (20.2x10 ⁻⁶)	ASTM-D-3386
Tensile shear strength at 77°F (25°C), psi (MPa)	1000 (6.9)	ASTM-D-1002
at 300°F (149°C)	500 (3.4)	--
Weight gain on immersion after 24 hours at 77°F (25°C), %		ASTM-D-543
MIL-S-3136, Type III	0.1	--
MIL-H-5606 hydraulic fluid	0.1	--
Skydrol hydraulic fluid	0.5	--
Distilled water	0.1	--

STORAGE/ SHELF LIFE : Epocast® 1610-A1 epoxy syntactic should be stored in a dry place in its original, sealed container at -40°F (-40°C) or 0°F (-18°C) temperatures. Material temperature should be above 65°F (18°C) when mixing. After use, tightly reseal containers.

When stored in its original, sealed container at -40°F (-40°C), the syntactic epoxy will remain useable for 6 months from date of shipping from Huntsman. When stored unopened at 0°F (-18°C), the material will remain useable for 3 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**

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