

Advanced Materials**EPOCAST® 938-A2 Epoxy Structural Syntactic****Description**

Epocast® 938-A-2 epoxy structural syntactic is a frozen, one-component, flame-retardant compound designed for reinforcing honeycomb structures. Epocast® 938-A-2 epoxy syntactic features high compressive strength at temperatures to >350°F (177°C). When thawed, it can be extruded from cartridges as a thixotropic paste. Epocast® 938-A2 is qualified to BMS, 5-28, Type 12 (classes 1 and 2) and Type 13; SMS 116201, Type 2; RMS 027, Type X; and others.

Features

One-part structural syntactic
Performs at temperatures of up to >350°F (177°C)
High compressive strength

Typical Properties (as received)

<u>Property</u>	<u>Test Values</u>	
	<u>Epocast® 938-A2</u>	<u>Test Method</u>
Color	Off-white	Visual
Density, g/cc	<1.4	ASTM-D-1622
Flow, inches	<0.2	BMS 5-28, RMS 027, SMS 116201
Extrudability, at 77°F (25°C), g/min.	>1,000	BMS 5-28, RMS 027, SMS 116201
Work life, 100 gms at 77°F (25°C), after thaw, hours	18	ASTMD-1338

Cure Schedule

Heat the material from room temperature at the rate of 5-7°F 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 as determined by thermocouple. (Slow heat rise to 5-7°F is preferred to reduce shrinkage and minimize 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 (82°C) water bath. This will bring material temperature to 120-125°F (49-51°C). Apply with a Semco air-operated sealant gun without nozzle.

Typical Cured Properties (Not for specification purposes)

<u>Property</u>	<u>Result</u>	<u>Test Method</u>
Ultimate Compressive strength: Test at 77°F (25°C), Ksi Test at 350°F (177°C), Ksi	>22.0 >13.0	ASTM-D-695
Tg, °F (°C), onset by TMA, using expansion probe	>356 (180)	ASTM-E-1363-90
% Fluid Weight Gain [DI water, Skydrol 500B, MIL-H-5606 hydraulic, ASTM_D_471 reference fuel)	<1.0	ASTM-D-543-87
Flammability, horizontal or vertical	Self-extinguishing	BSS 7230

Packaging and Shipping

Epocast[®] 938-A2 resin is a nonrestricted article.

STORAGE:

Epocast[®] 938 A-2 should be stored in a dry place, in the sealed original container, at a temperature of -20°F (-29°C) or lower. 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 3 months (expiration date may differ based on customer specification).

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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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