

Advanced Materials

Epocast® 1633 A/B Epoxy Syntactic

- **Flame retardant**
- **Quick setting**
- **Halogen free**

DESCRIPTION

Epocast® 1633 A/B epoxy syntactic is a halogen-free, flame-retardant paste designed for potting fasteners in honeycomb structures. Epocast® 1633 A/B epoxy syntactic sets quickly at room temperature.

TYPICAL PROPERTIES AS RECEIVED

Property	Test Method	1633 A Resin	1633 B Hardener	Mixed System
Color	Visual	Light Blue	Off-white	Light Blue
Density, g/cc	ASTM D792	0.68	0.66	0.73
Viscosity at 77°F (25°C)	ASTM D2196	Soft-paste	Soft-paste	Paste
Work life, 10g at 77°F (25°C), min	ASTM D1338	--	--	2-5

MIX RATIO

To 100 parts by weight of Epocast® 1633 A resin, add 50 parts by weight of Epocast® 1633 B hardener. Due to the very fast setting properties of Epocast® 1633 A/B, hand mixing of the components should be avoided. Epocast® 1633 A/B is available in 50 mL and 200 mL twin cartridges. For best results, Epocast® 1633 A/B should be dispensed using manual or pneumatic dispensing equipment through a suitable mixing nozzle as shown below:

Volume	Description	Manufacturer
50mL	0.25 in / 20 element spiral	Nordson EFD #7701488 or equivalent
	0.50 in / 18 element spiral	Nordson EFD #7701782, Sulzer-Mixpac # MCH13-18T, or equivalent
200mL	0.44 in / 20 element Turbo	Nordson EFD #7701816 or equivalent
	0.37 in / 12 element spiral	Nordson EFD #7700885 or equivalent

For other mixing and application recommendations, please consult your local Huntsman Advanced Materials representative or one of our distributors.

CURE SCHEDULE

1. Gel at 77°F (25°C) plus 5 hours at 120°F (49°C) or
2. Gel at 77°F (25°C) plus 2 hours at 150°F (66°C) or
3. 3 days at room temperature

TYPICAL CURED PROPERTIES (Not for specification purposes)

Test	Method	Result
Compressive strength, psi (MPa) at 77°F (25°C) at 180°F (82°C) at 250°F (121°C)	ASTM D695	6,500 (44.8) 550 (3.8) 400 (2.8)
Compressive modulus, Ksi (MPa), at 77°F (25°C)	ASTM D695	270 (1,862)
Tensile lap shear, psi (MPa), at 77°F (25°C) Chromic acid etched Al-Al Etched and primed Al-Al	ASTM D1002	1,400 (9.6) 1,600 (11.0)
Percent weight gain, 24 hours immersion at 77°F (25°C) TTS-735, Type III test fluid Mil-M-5606 hydraulic fluid Skydrol 500-A Distilled water	ASTM D570	0.3 0.4 0.7 2.5

STORAGE

When stored in a dry place in its original sealed container at a temperature between +2°C and +40°C (+36°F and +104°F) Epocast[®] 1633 A/B Epoxy Syntactic has a 6 months shelf-life from date of shipment. Expiration date may differ based on customer specification (actual expiration date can be found on the product batch certificate of conformance). This material should not be exposed to direct sunlight. Material temperatures should be above 18°C (65°F) when mixing.

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

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