

Epocast[®] 1618 D/B Epoxy Syntactic

Product Description

Epocast[®] 1618 D/B Epoxy Syntactic is a low-density, flame retardant compound for potting fasteners in honeycomb structures. The lightweight epoxy is easy to extrude through a 1/8 in (3 mm) nozzle orifice, but is non-flowing after application. Epocast[®] 1618 D/B Epoxy Syntactic sets quickly at room temperature and is qualified to BMS 5-28, Type 18, Class 1. It is the suggested alternative for the discontinued Epocast[®] 1616 A/B, Epocast[®] 1618 A/B, and Epocast[®] 1620 A/B systems.

Features

- Flame retardant
- Quick setting
- Pumpable

Typical Properties*

Property	1618 D Resin	1618 B Hardener	Mixed System	Test Method
Appearance	White	Amber	White	Visual
Density, g/cm ³	0.60	1.00	0.70	ASTM D1622
Viscosity at 25°C, cP	Paste	400	Paste	ASTM D2196

*Typical properties are based on Huntsman's test methods. Copies are available upon request.

Processing Data

Mix Ratio

Product	Parts by weight
Epocast [®] 1618 D Resin	100
Epocast [®] 1618 B Hardener	14

Mix both components thoroughly for several minutes to assure complete blending. Resin/filler separation may occur. Remix before use. Material temperatures should be above 18°C (65°F) when mixing.

Processing Data

Parameter	Value
Gel time, 57 g at 77°F (25°C), min	15
Typical Cure Cycle	24 h at RT or gel at RT + 5 h @ 125°F (52°C)

Typical Physical Properties

Unless otherwise stated, the data were determined with typical production batches using standard test methods. They are typical values only, and do not constitute a product specification.

Property	Test Method	Value
Tensile lap shear strength @ 77°F (25°C), Al-Al, psi (MPa)	ASTM D-1002	700 (4.8)
Compressive strength, psi (MPa) @ 77°F (25°C) @ 180°F (82°C)	ASTM D-695	6,150 (42.4) 450 (3.1)
Compressive modulus, kpsi (MPa) @ 77°F (25°C)	ASTM D-695	350 (2.4)
Flammability, horizontal	--	Self-extinguishing
Water absorption, after 24 hours at 25°C, % wt. Mil-S-3136, Type III test fluid Mil-H-5606 hydraulic fluid Skydrol 500A Distilled water	ASTM D-543	0.3 0.4 0.6 1.5

Storage

Epocast® 1618 D/B Epoxy Syntactic should be stored in a dry place, in the original sealed container at temperatures between 2°C and 40°C (35.6°F and 104°F). Tightly reseal containers after each use. Under these storage conditions, and when supplied under Huntsman standard certification, the product has a shelf-life of **6 months** (from date of manufacture). The components should not be exposed to direct sunlight.

Precautionary Statement

Huntsman Advanced Materials Americas LLC maintains up-to-date Safety Data Sheets (SDS) 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 SDS as mentioned above.

KEEP OUT OF REACH OF CHILDREN

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