

Advanced Materials

Epocast[®] 1618 D/B Epoxy Syntactic

- **Flame Retardant**
- **Quick Setting**
- **Pumpable**

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 epoxy syntactic, Epocast[®] 1618 A/B epoxy syntactic, and Epocast[®] 1620 A/B epoxy syntactic systems.

TYPICAL PROPERTIES AS RECEIVED

Property	Test Method	1618 D Resin	1618 B Hardener	Mixed System
Color	Visual	White	Amber	White
Density, g/cc	ASTM D1622	0.60	1.00	0.70
Viscosity, cP at 77°F (25°C)	ASTM D2196	Paste	400	Paste
Gel Time, 57g at 77°F (25°C), min	ASTM D2471	--	--	15

MIX RATIO

To 100 parts by weight of Epocast[®] 1618 D resin, add 14 parts by weight of Epocast[®] 1618 B hardener. Mix both components thoroughly for several minutes to assure complete blending.

CURE SCHEDULE

24 hours at room temperature or gel at room temperature plus five hours at 125°F (52°C).

TYPICAL CURED PROPERTIES (Not for specification purposes)

Test	Test Method	Results
Compressive strength, psi (MPa)	ASTM D695	
at 77°F (25°C)		6,150 (42.4)
at 180°F (82°C)		450 (3.1)
Compressive modulus, ksi (GPa) at 77°F (25°C)	ASTM D695	350 (2.4)
Tensile lap shear, Al-Al, at 77°F (25°C), psi (MPa)	ASTM D1002	700 (4.8)
Weight change, 24 hours immersion at 77°F (25°C), %	ASTM D543	
Mil-S-3136, Type III test fluid		0.3
Mil-M-5606 hydraulic fluid		0.4
Skydrol 500A		0.6
Distilled water		1.5
Flammability	--	Self-extinguishing

STORAGE

Epocast® 1618 D/B should be stored in a dry place, in the sealed original container, at temperatures between +2°C and +40°C (+35.6°F and 104°F). 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 6 months from date of shipment (expiration date may differ based on customer specification).

Material temperatures should be above 18°C (65°F) when mixing. After use, tightly reseal containers.

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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