

Advanced Materials**EPOCAST[®] 1622 FST A/B Epoxy Syntactic**

- Meets FST Requirements
- Quick Set Potting Adhesive
- High-Strength/Density Ratio over a Range of Temperatures
- No SVHC as defined by REACH*
- Pumpable

DESCRIPTION:

EPOCAST[®] 1622 FST A/B is a two-component, low density, pumpable FST epoxy syntactic material designed for potting fasteners and panel joining of honeycomb structures used in aerospace interior applications. It is easily extruded through Semco[®] dispensing nozzles, yet does not flow after it has been applied. EPOCAST[®] 1622 FST A/B sets quickly at room temperature and is well suited for aerospace applications requiring a rapid component assembly.

TYPICAL PROPERTIES AS RECEIVED:

<u>Property</u>	<u>1622 FST A</u>	<u>1622 FST B</u>	<u>A/B</u>	<u>Test Method</u>
Color	Off-white	Amber	Off-white	Visual
Specific gravity	0.73	1.00	0.77	ASTM-D-1622
Viscosity, cp at 77°F	Paste	14	Paste	ASTM-D-2196
Gel time, 55.7g at 77°F, minutes	--	--	15	ASTM-D-2471
Shelf life at 77°F, unopened, months	12	12	--	--

MIX RATIO:

To 100 parts by weight of EPOCAST[®] 1622 FST A resin, add 11.5 parts by weight of EPOCAST[®] 1622 FST B hardener. Mix both components thoroughly for several minutes to ensure complete mixing.

CURE SCHEDULE:

3 to 5 days at room temperature or gel at room temperature plus 3 to 5 hours at 125°F (52°C).

TYPICAL CURED PROPERTIES (Not for specification purposes)

<u>Test</u>	<u>Result</u>	<u>Test Method</u>
Insert pull-out strength, lb at 73°F	300	--
Insert torque-out strength, in-lb at 73°F	100	--
Compressive strength, psi (MPa) at 73°F (23°C)	8500 (58.6)	ASTM-D-695
Compressive strength, psi (MPa) at 158°F (70°C)	3000 (20.7)	ASTM-D-695
Compressive modulus, ksi (GPa) at 73°F	350 (2.41)	ASTM-D-695
Tensile lap shear, AL/AL, psi at 73°F (23°C)	1700 (11.7)	ASTM-D-1002
Tg (°C)	78	ASTM-E1545

* Does not intentionally contain any Substances of Very High Concern (SVHC) for authorization as published by the European Chemicals Agency (ECHA) pursuant to Article 59 REACH as of December 19, 2012

CTE (below Tg), $\mu\text{m}/(\text{m}\times^{\circ}\text{C})$	39.2	ASTM-E-831
CTE (above Tg), $\mu\text{m}/(\text{m}\times^{\circ}\text{C})$	80.7	
Shrinkage, %	0.41	ASTM-D-6289
Flammability (12 second vertical burn)		FAR 25.853
Extinguish time, second	< 1.0	Appendix F1
Burn length, inch	< 1.0	
Smoke density @4 minutes	90	ASTM-E-662
Toxic gas concentrations of smoke @ 4minutes, ppm		
HCN	5	
CO	65	
NOx	60	
SO ₂	15	
HCl	5	
HF	1.5	
Extrusion rate, g/min	350	--
Flow resistance, inch	< 0.1	--

STORAGE: The EPOCAST[®] 1622 FST A/B epoxy syntactic adhesive should be stored in a dry place, preferably in the sealed original container, at temperatures between +2°C to +40°C (+35.6°F and 104°F). Under these storage conditions the shelf life is 12 months. The product should not be exposed to direct sunlight.

Material temperatures should be above 65°F (18°C) 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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