# Epocast 1619-A/B

## Epoxy; Epoxide

General Information

**Huntsman Advanced Materials** 

#### Message:

DESCRIPTION: Epocast ® 1619-A/B epoxy syntactic is a low-density, self-extinguishing compound for potting fasteners in honeycomb structures. The lightweight epoxy can be poured or extruded through a 1/8 in. (3mm) nozzle orifice. Epocast ® 1619-A/B epoxy syntactic is resistant to water, fungus and most aircraft fluids and is qualified to BMS 5- 28, Type 19.

	delleral illioittiation			
Antibacterial property Self-extinguishing  Amber White-like  Forms Liquid  Processing Method potting Extrusion  Physical Nominal Value Unit Test Method  Specific Gravity ASTM D1622 1 0.599 g/cm² ASTM D1622 2 0.998 g/cm² ASTM D1622 3 0.599 g/cm² ASTM D1622 4 0.599 g/cm² ASTM D1622 2 0.998 g/cm² ASTM D1622	Features	Low density		
Appearance		Moisture resistance		
Appearance Amber White-like  Forms Liquid  Processing Method potting Extrusion  Physical Nominal Value Unit Test Method  Specific Gravity		Antibacterial property		
Forms         Liquid           Processing Method         potting Extrusion           Physical         Nominal Value         Unit         Test Method           Specific Gravity         ASTM D1622          1         0.599         g/cm²         ASTM D1622          2         0.998         g/cm²         ASTM D1622          3         0.998         g/cm²         ASTM D1622           Hardness         Nominal Value         Unit         Test Method           Durometer Hardness (Shore D)         65         ASTM D2240           Mechanical         Nominal Value         Unit         Test Method           Compressive Modulus         2410         MPa         ASTM D695           Flammability         Nominal Value         Unit         Test Method           Flammability         Self Extinguishing         Self Extinguishing           Gel Time (25°C)³         20.0 - 50.0         min         ASTM D2196           25°C         Semi-Paste         ASTM D2196           Extrudability (3.18 mm)         350         g/min           Tensile Lap Shear - AL/AL         8.62         MPa         ASTM D202           ASTM D203         MPa         ASTM D1002		Self-extinguishing		
Forms         Liquid           Processing Method         potting Extrusion           Physical         Nominal Value         Unit         Test Method           Specific Gravity         ASTM D1622          1         0.599         g/cm²         ASTM D1622          2         0.998         g/cm²         ASTM D1622          3         0.998         g/cm²         ASTM D1622           Hardness         Nominal Value         Unit         Test Method           Durometer Hardness (Shore D)         65         ASTM D2240           Mechanical         Nominal Value         Unit         Test Method           Compressive Modulus         2410         MPa         ASTM D695           Flammability         Nominal Value         Unit         Test Method           Flammability         Self Extinguishing         Self Extinguishing           Gel Time (25°C)³         20.0 - 50.0         min         ASTM D2196           25°C         Semi-Paste         ASTM D2196           Extrudability (3.18 mm)         350         g/min           Tensile Lap Shear - AL/AL         8.62         MPa         ASTM D202           ASTM D203         MPa         ASTM D1002				
Forms         Liquid           Processing Method         potting           Extrusion         Extrusion           Physical         Nominal Value         Unit         Test Method           Specific Gravity         ASTM D1622         ASTM D1622          1         0.599         g/cm²         ASTM D1622          2         0.698         g/cm²         ASTM D1622          2         0.998         g/cm²         ASTM D1622           Hardness         Nominal Value         Unit         Test Method           Durometer Hardness (Shore D)         65         ASTM D240           Mechanical         Nominal Value         Unit         Test Method           Compressive Modulus         2410         MPa         ASTM D695           Compressive Strength (25°C)         37.9         MPa         ASTM D695           Flammability         Nominal Value         ASTM D695           Flammability         Nominal Value         ASTM D296           Ed Time (25°C)³         20.0 - 50.0         min         ASTM D241           Thermoset Mix Viscosity         ASTM D2196         ASTM D2196           25°C 4         Semi-Paste         ASTM D2196           Extrudability (3.18 mm)	Appearance	Amber		
Processing Method         potting Extrusion           Physical         Nominal Value         Unit         Test Method           Specific Gravity          ASTM D1622		White-like		
Processing Method         potting Extrusion           Physical         Nominal Value         Unit         Test Method           Specific Gravity         ASTM D1622          1         0.599         g/cm³         ASTM D1622          2         0.698         g/cm³         ASTM D1622           Hardness         Nominal Value         Unit         Test Method           Durometer Hardness (Shore D)         65         ASTM D240           Mechanical         Nominal Value         Unit         Test Method           Compressive Modulus         2410         MPa         ASTM D695           Compressive Strength (25°C)         37.9         MPa         ASTM D695           Flammability         Nominal Value         Hardnessity         ASTM D695           Flammability         Self Extinguishing         ASTM D695           Flarmability         Self Extinguishing         ASTM D2471           Thermoset Mix Viscosity         ASTM D2196         25°C         Semi-Paste         ASTM D2196           25°C 4         Semi-Paste         ASTM D2196         ASTM D2196           Extrudability (3.18 mm)         350         g/min         ASTM D1002           Weight Gain 5         Keight Gain 5         ASTM D543 </td <td></td> <td></td> <td></td> <td></td>				
Physical         Nominal Value         Unit         Test Method           Specific Gravity         ASTM D1622          1         0.599         g/cm³         ASTM D1622          2         0.698         g/cm³         ASTM D1622          2         0.998         g/cm³         ASTM D1622           Hardness         Nominal Value         Unit         Test Method           Durometer Hardness (Shore D)         65         ASTM D2240           Mechanical         Nominal Value         Unit         Test Method           Compressive Modulus         2410         MPa         ASTM D695           Compressive Strength (25°C)         37.9         MPa         ASTM D695           Flammability         Nominal Value         Test Method         ASTM D695           Flammability         Self Extinguishing         ASTM D695           Gel Time (25°C) ³         20.0 - 50.0         min         ASTM D2471           Thermoset Mix Viscosity         ASTM D2196         25°C         ASTM D2196           25°C         Semi-Paste         ASTM D2196           Extrudability (3.18 mm)         350         MPa         ASTM D1002           Weight Gain ⁵         ASTM D1002         ASTM D543	Forms	Liquid		
Physical         Nominal Value         Unit         Test Method           Specific Gravity         ASTM D1622          ¹         0.599         g/cm³         ASTM D1622          ²         0.698         g/cm³         ASTM D1622          ²         0.998         g/cm³         ASTM D1622           Hardness         Nominal Value         Unit         Test Method           Durometer Hardness (Shore D)         65         ASTM D2240           Mechanical         Nominal Value         Unit         Test Method           Compressive Modulus         2410         MPa         ASTM D695           Compressive Strength (25°C)         37.9         MPa         ASTM D695           Flammability         Nominal Value         Hardness         ASTM D695           Flammability         Self Extinguishing         ASTM D2471           Thermoset Mix Viscosity         200 - 50.0         min         ASTM D2471           Thermoset Mix Viscosity         Semi-Paste         ASTM D2196           25°C 4         Semi-Paste         ASTM D2196           Extrudability (3.18 mm)         350         g/min           Tensile Lap Shear - AL/AL         ASTM D2196           Weight Gain 5         ASTM D243	Processing Method	potting		
Specific Gravity         ASTM D1622          1         0.599         g/cm³         ASTM D1622          2         0.698         g/cm³         ASTM D1622          2         0.998         g/cm³         ASTM D1622           Hardness         Nominal Value         Unit         Test Method           Durometer Hardness (Shore D)         65         ASTM D240           Mechanical         Nominal Value         Unit         Test Method           Compressive Modulus         2410         MPa         ASTM D695           Compressive Strength (25°C)         37.9         MPa         ASTM D695           Flammability         Nominal Value         Weight G25°C)         ASTM D695           Flammability         Self Extinguishing         ASTM D2471           Thermoset Mix Viscosity         ASTM D2471         ASTM D2471           25°C         Semi-Paste         ASTM D2196           25°C         Semi-Paste         ASTM D2196           Extrudability (3.18 mm)         350         g/min           Tensile Lap Shear - AL/AL         8.62         MPa         ASTM D543		Extrusion		
Specific Gravity         ASTM D1622          1         0.599         g/cm³         ASTM D1622          2         0.698         g/cm³         ASTM D1622          2         0.998         g/cm³         ASTM D1622           Hardness         Nominal Value         Unit         Test Method           Durometer Hardness (Shore D)         65         ASTM D240           Mechanical         Nominal Value         Unit         Test Method           Compressive Modulus         2410         MPa         ASTM D695           Compressive Strength (25°C)         37.9         MPa         ASTM D695           Flammability         Nominal Value         Weight G25°C)         ASTM D695           Flammability         Self Extinguishing         ASTM D2471           Thermoset Mix Viscosity         ASTM D2471         ASTM D2471           25°C         Semi-Paste         ASTM D2196           25°C         Semi-Paste         ASTM D2196           Extrudability (3.18 mm)         350         g/min           Tensile Lap Shear - AL/AL         8.62         MPa         ASTM D543				
1	Physical	Nominal Value	Unit	Test Method
0.698	Specific Gravity			ASTM D1622
Durometer Hardness (Shore D) 65	1	0.599	g/cm³	ASTM D1622
Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 65 ASTM D2240  Mechanical Nominal Value Unit Test Method Compressive Modulus 2410 MPa ASTM D695 Compressive Strength (25°C) 37.9 MPa ASTM D695 Flammability Nominal Value Flammability Self Extinguishing Gel Time (25°C) 20.0 - 50.0 min ASTM D2471 Thermoset Mix Viscosity ASTM D2196 25°C Semi-Paste ASTM D2196 Extrudability (3.18 mm) 350 g/min Fensile Lap Shear - AL/AL 8.62 MPa ASTM D1002 Weight Gain 5		0.698	g/cm³	ASTM D1622
Durometer Hardness (Shore D) 65	<sup>2</sup>	0.998	g/cm³	ASTM D1622
MechanicalNominal ValueUnitTest MethodCompressive Modulus2410MPaASTM D695Compressive Strength (25°C)37.9MPaASTM D695FlammabilityNominal ValueFlammabilitySelf ExtinguishingGel Time (25°C) 320.0 - 50.0minASTM D2471Thermoset Mix ViscosityASTM D219625°CSemi-PasteASTM D219625°C 4Semi-PasteASTM D2196Extrudability (3.18 mm)350g/minTensile Lap Shear - AL/AL8.62MPaASTM D1002Weight Gain 5ASTM D543	Hardness	Nominal Value	Unit	Test Method
Compressive Modulus 2410 MPa ASTM D695 Compressive Strength (25°C) 37.9 MPa ASTM D695 Flammability Nominal Value Flammability Self Extinguishing Gel Time (25°C) 3 20.0 - 50.0 min ASTM D2471 Thermoset Mix Viscosity ASTM D2196 25°C Semi-Paste ASTM D2196 25°C Semi-Paste ASTM D2196 Extrudability (3.18 mm) 350 g/min Tensile Lap Shear - AL/AL 8.62 MPa ASTM D1002 Weight Gain 5 ASTM D1002	Durometer Hardness (Shore D)	65		ASTM D2240
Compressive Strength (25°C) 37.9 MPa ASTM D695  Flammability Self Extinguishing  Gel Time (25°C) 3 20.0 - 50.0 min ASTM D2471  Thermoset Mix Viscosity ASTM D2196 25°C Semi-Paste ASTM D2196  Extrudability (3.18 mm) 350 g/min  Tensile Lap Shear - AL/AL 8.62 MPa ASTM D543	Mechanical	Nominal Value	Unit	Test Method
Flammability  Self Extinguishing  Gel Time (25°C) 3  20.0 - 50.0  min  ASTM D2471  ASTM D2196  25°C  Semi-Paste  Semi-Paste  Extrudability (3.18 mm)  350  MPa  ASTM D1002  ASTM D1002  ASTM D1002  ASTM D1002  ASTM D1002  ASTM D1002	Compressive Modulus	2410	МРа	ASTM D695
Flammability  Gel Time (25°C) 3  20.0 - 50.0  min  ASTM D2471  ASTM D2196  25°C  Semi-Paste  Semi-Paste  Extrudability (3.18 mm)  350  Gel Time (25°C) 4  ASTM D2196	Compressive Strength (25°C)	37.9	МРа	ASTM D695
Gel Time (25°C) 3       20.0 - 50.0       min       ASTM D2471         Thermoset Mix Viscosity       ASTM D2196         25°C       Semi-Paste       ASTM D2196         25°C 4       Semi-Paste       ASTM D2196         Extrudability (3.18 mm)       350       g/min         Tensile Lap Shear - AL/AL       8.62       MPa       ASTM D1002         Weight Gain 5       ASTM D543	Flammability	Nominal Value		
Thermoset Mix Viscosity         ASTM D2196           25°C         Semi-Paste         ASTM D2196           25°C 4         Semi-Paste         ASTM D2196           Extrudability (3.18 mm)         350         g/min           Tensile Lap Shear - AL/AL         8.62         MPa         ASTM D1002           Weight Gain 5         ASTM D543	Flammability	Self Extinguishing		
25°C       Semi-Paste       ASTM D2196         25°C 4       Semi-Paste       ASTM D2196         Extrudability (3.18 mm)       350       g/min         Tensile Lap Shear - AL/AL       8.62       MPa       ASTM D1002         Weight Gain 5       ASTM D543	Gel Time (25°C) <sup>3</sup>	20.0 - 50.0	min	ASTM D2471
25°C <sup>4</sup> Semi-Paste     ASTM D2196       Extrudability (3.18 mm)     350     g/min       Tensile Lap Shear - AL/AL     8.62     MPa     ASTM D1002       Weight Gain <sup>5</sup> ASTM D543	Thermoset Mix Viscosity			ASTM D2196
Extrudability (3.18 mm)         350         g/min           Tensile Lap Shear - AL/AL         8.62         MPa         ASTM D1002           Weight Gain 5         ASTM D543	25°C	Semi-Paste		ASTM D2196
Tensile Lap Shear - AL/AL 8.62 MPa ASTM D1002 Weight Gain <sup>5</sup> ASTM D543	25°C <sup>4</sup>	Semi-Paste		ASTM D2196
Weight Gain <sup>5</sup> ASTM D543	Extrudability (3.18 mm)	350	g/min	
	Tensile Lap Shear - AL/AL	8.62	MPa	ASTM D1002
Distilled Water: 25°C 1.5 % ASTM D543	Weight Gain <sup>5</sup>			ASTM D543
	Distilled Water : 25°C	1.5	%	ASTM D543

Mil-M-5606 hydraulic fluid	0.40	%	ASTM D543		
Skydol 500-A : 25°C	0.60	%	ASTM D543		
TT-S-735, Type III test fluid : 25°C	0.30	%	ASTM D543		
Thermoset	Nominal Value	Unit	Test Method		
Thermoset Components					
Resin	Mixing ratio by weight: 100				
Hardening method	Mixing ratio by weight: 25				
Shelf Life	26	wk			
Thermoset Mix Viscosity <sup>6</sup> (25°C)	400	сР	ASTM D2196		
Additional Information	Nominal Value	Unit	Test Method		
CURE SCHEDULE: Seven days at 77°F (25	°C), or gel at room temperature	olus five hours at 125°F (52°C).			
NOTE					
1.	Resin				
2.	Hardener				
3.	50 gms				
4.	Resin	Resin			
5.	24 hrs				
6.	Hardener				

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