

**Advanced Materials****Epocast<sup>®</sup> 1652-A/B****EPOXY SYNTACTIC**

- Low Density Syntactic
- Thick Paste Consistency
- High Compressive Strength

**DESCRIPTION :**

Epocast<sup>®</sup> 1652-A/B epoxy syntactic is a low-density system with good elevated temperature performance after a room-temperature cure. The epoxy syntactic is suitable for core filling metal skins, adding stiffness and strength to fabricated parts such as helicopter rotor blades, core splicing, and strengthening radii and corners of reinforced plastic structures. Epocast<sup>®</sup> 1652-A/B epoxy syntactic is qualified to Grumman GM 4006, Gulfstream GMS 4005 and Sikorsky 9587, Type 2.

**TYPICAL PROPERTIES AS RECEIVED :**

| <b><u>Property</u></b>                    | <b><u>1652-A<br/>Resin</u></b> | <b><u>1652-B<br/>Hardener</u></b> | <b><u>1652-A/B<br/>System</u></b> | <b><u>Test Method</u></b> |
|-------------------------------------------|--------------------------------|-----------------------------------|-----------------------------------|---------------------------|
| Color                                     | Light Tan                      | Amber                             | Light Tan                         | Visual                    |
| Density, g/cc.                            | 0.80                           | 1.00                              | 0.8                               | ASTM-1622                 |
| Viscosity, cP at 77°F (25°C)              | Paste                          | 500                               | Semi-paste                        | ASTM-D-2196               |
| Gel time, 100 gms at 77°F (25°C), minutes | --                             | --                                | 30-60                             | ASTM-D-2471               |

**MIX RATIO :**

To 100 parts by weight of Epocast<sup>®</sup> 1652-A resin, add 12 parts by weight of Epocast<sup>®</sup> 1652-B hardener. Mix both components thoroughly for several minutes to insure complete blending.

**CURE SCHEDULE :**

Seven days at 77°F (25°C), or gel at 77°F (25°C) followed by 2-3 hours at 150°F (66°C ).

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**TYPICAL CURED PROPERTIES** (Not for specification purposes)

| <b>Test</b>                                                 | <b>Result</b> | <b>Test Method</b> |
|-------------------------------------------------------------|---------------|--------------------|
| Compressive strength, Ksi (MPa) (2% strain) @ -67°F (-55°C) | 9.50 (65.5)   | ASTM-D-695         |
| @ 77°F (25°C)                                               | 8.00 (55)     | --                 |
| @ 180°F (83°C)                                              | 4.00 (27.6)   | --                 |
| @ 350°F (177°C)                                             | 0.65 (4.5)    | --                 |
| Ultimate compressive strength, Ksi (MPa) @ 77°F (25°C)      | 9.00 (62)     | --                 |
| Tensile lap shear, (etched AL/AL), @ 77°F (25°C), psi (MPa) | 700 (4.8)     | ASTM-D-1002        |

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**STORAGE:**

Epocast<sup>®</sup> 1652-A/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 1 year (expiration date may differ based on customer specification).

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

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**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****FOR PROFESSIONAL AND INDUSTRIAL USE ONLY**

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