

TECHNICAL DATA SHEET

EPOLAM 2500

FLAME RETARDANT EPOXY LAMINATING SYSTEM

FLAME RETARDANT, FILLED, FOR FAR 25.853A COMPOSITE LAMINATING APPLICATIONS

DESCRIPTION

Epolam 2500 is designed for production of composite parts requiring flame and temperature resistance. Epolam 2500 meets the requirements of FAR 25.853a and Eurocopter specification ECS.2196.20 for interior fittings manufacture and repair.

APPLICATIONS

- *High performance flame retardant marine, architectural, aerospace, transportation applications*
- *Suitable for wet layup, vacuum-bagging*

PROPERTIES

- *No aromatic amines*
- *High Modulus*
- *Temperature resistance of 100°C*
- *Self-extinguishing FAR 25*
- *Good mechanical properties*
- *RoHS and REACH compliant*

| PHYSICAL PROPERTIES HANDLING @ 77°F (25°C) | | | | | |
|--|----------------|-----------------|-------------------|----------------------|------------------|
| Property | Test Method | Unit(s) | Epolam 2500 Resin | Epolam 2500 Hardener | Mixed System |
| Mix ratio – by weight Mix ratio – by volume | | | | | 100/22 100/29 |
| Aspect | | | Liquid | Liquid | Liquid |
| Color | | Visual | White | Amber | White |
| Viscosity | Brookfield LVT | Cps & Mpa | 12,700 | 112 | 3,190 |
| Specific Gravity | ISO 1675:1985 | lbs./gal (g/cc) | 10.71 (1.28) | 7.96 (.95) | |
| Specific Gravity (Cured) | ISO 2781:1985 | lbs./gal (g/cc) | | | 10.07 (1.21) |
| Gel Time (500 g) | | minutes | | | 78 |

| Neat Cured Properties Tested at 74°F (23°C) | | | |
|--|-------------|-----------|------------------------------------|
| | Test Method | Unit(s) | Test Results |
| Glass Transition Temperature (Tg) *Cure #1 **Cure #2 | ASTM E1545 | °F (°C) | 139 (59) 220 (104) |
| Hardness *Cure #1 **Cure #2 | ASTM D-2240 | Shore D | 91 90 |
| Flexural Strength *Cure #1 **Cure #2 | ASTM D790 | psi (MPa) | 8,733 (60) 9,790 (68) |
| Flexural Modulus *Cure #1 **Cure #2 | ASTM D790 | psi (MPa) | 699,992 (4,830) 593,023 (4,092) |
| Tensile Strength *Cure #1 **Cure #2 | ASTM D638 | psi (MPa) | 5,604 (39) 6,073 (42) |
| Tensile Modulus *Cure #1 **Cure #2 | ASTM D638 | psi (MPa) | 422,647 (2,916) 339,383 (2,342) |
| Tensile Elongation *Cure #1 **Cure #2 | ASTM-D638 | % | 1.5 2.1 |

*Cured-7 days at 77°F (25°C) **Cured 4 hours at 212°F (100°C). Results are average values on laboratory prepared test samples

PROCESSING

Mix resin side well in can before use as filler may separate or settle. After mixing resin and hardener according to the indicated ratio, carry out wetting/impregnation of the reinforcements. To ensure optimal use and a good impregnation, please use material at a temperature of 68°F - 77°F (20°C - 25°C) if possible. Seal containers well after each use.

HANDLING PRECAUTIONS

Normal health and safety precautions should be observed when handling these products:

- Ensure good ventilation.
- Wear gloves, glasses and protective clothes.

For further information, please consult the Safety Data Sheets.

STORAGE CONDITIONS

- Product shelf life of resin and hardener is 12 months when stored in original unopened containers between 65 – 77°F (15 – 25°C). Any opened can must be tightly closed. Any opened can must be tightly closed.

PACKAGING

Packaging information on request, please contact your local sales representative or find your local contact on www.sikaadvancedresins.us

LEGAL NOTICE

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