



MFE® 711

MFE 711 is a premium standard Bisphenol-A type epoxy vinyl ester resin. It provides resistance to a wide range of acids, alkalis, bleaches and solvents used in many chemical processing industry applications.

FEATURES

- Easier workability, good air drying
- Shorter gel-to-cure interval, reduced stress cracking
- Higher elongation provides FRP equipment with increased toughness
- Longer shelf life provides additional flexibility to fabricators in storage and handling
- Lighter color makes defects earlier detection of defects before resin curing
- Increased hand lay-up thickness per session

APPLICATIONS

- Suitable for FRP storage tanks, vessels, ducts, and on-site maintenance projects, particularly in chemical processing and pulp and paper operations
- Suitable for hand lay-up, spray-up, filament winding, compression molding and resin transfer molding techniques, pultrusion and molded grating applications
- Complies with FDA regulation 21 CFR 177.2420, covering materials intended for repeated use in contact with food
- Lloyds' approved

LIQUID RESIN PROPERTIES ⁽¹⁾

| Property | Range | TM |
|--|---------------------|----------|
| Appearance | Light yellow liquid | Visual |
| Viscosity, cps (25 °C) | 250 - 450 | ISO 2555 |
| Gel Time ⁽²⁾ , min (25 °C) | 20.0 ± 5.0 | ISO 2535 |
| Styrene Content, % | 42.0 - 48.0 | - |
| Shelf Life ⁽³⁾ , Dark (25 °C) | 10 months | |

PROPERTIES ⁽¹⁾ OF PURE RESIN CASTING

| Property | Value | TM |
|------------------------|-----------|-----------|
| Tensile Strength, MPa | 80 - 95 | ASTM D638 |
| Tensile Modulus, GPa | 3.2 - 3.7 | ASTM D638 |
| Tensile Elongation, % | 5.0 - 6.0 | ASTM D638 |
| Flexural Strength, MPa | 120 - 150 | ASTM D790 |

| | | |
|-----------------------|-----------|------------|
| Flexural Modulus, GPa | 3.3 - 3.8 | ASTM D790 |
| Barcol hardness | 38 - 42 | ASTM D2583 |
| HDT (1.8 MPa), °C | 100 - 106 | ASTM D648 |

- (1) Typical property values only, not to be construed as specifications.
 (2) Water bath at 25 °C, 100 g of resin was added with 1.2 % M-50 (AkzoNobel) and 1.8 % P001 (1 % cobalt content cobalt octoate solution).
 (3) Unopened drum with no additives, promoters, accelerators, etc. added. Shelf life specified from date of manufacture.

TESTING CONDITIONS

Temperature: 25 °C. Relative moisture: 50 ± 5 %.

PACKING& STORAGE

Net weight 20 Kg / iron drum, 200 Kg / iron drum, 1000 Kg / IBC tank.
 The storage environment should be dry and ventilated. The storage period below 25 °C is 10 months, Improper storage or transportation conditions will cause a shortening of the resin's storage period. The products shall comply with the provisions on the storage, transportation, loading and unloading of hazardous chemicals in the Regulations on the Safety Management of Hazardous Chemicals of the State Council. It is recommended to transport resin by refrigerated truck when the temperature exceeds 35 °C, and transport it at night to avoid direct sunlight.

MATERIAL SAFETY& TEST METHODS

A Material Safety Data Sheet of this product is available on request.
 Test methods (TM) referred to in the table(s) are available on request.

SINO POLYMER is a leading manufacturer of epoxy vinyl ester resin, unsaturated polyester, epoxy resin, polysulphone, coating and adhesives since year 1958, with its headquarter and plant located in Shanghai Chemical Industry Park, P.R. China. The company's Total Quality Management Gene's guaranty sustainable product & service quality, lead time and competitiveness, as the Safety & Security Management, Improvement Process, R&D and International developments make Sino Polymer a sustainable partner on long term.

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