



MFE® 707 H

MFE 707H is a reactive, flame-retardant epoxy vinyl ester resin with a high bromine content. It is suitable for pultrusion, hand lay-up, spray up, filament winding, centrifugal pouring, infusion and other process.

FEATURES

- Excellent flame retardant, self-extinguishing and high oxygen index
- Excellent chemical and thermal resistance
- Good wet-out to fiberglass and excellent mechanical properties

APPLICATIONS

- Suitable for making FRP products with flame retardant and low smoke requirements, such as FRP plates and flues for indoor use
- Suitable for making transportation components, such as train interior panels, FRP parts of rail transit, FRP storage tanks and containers

LIQUID RESIN PROPERTIES

Property ⁽¹⁾	Range	TM
Appearance	Light yellow transparent liquid	Visual
Acid Value,mg KOH/g	10.0 ± 4.0	ISO 2114
Viscosity, cps (25 °C)	350 ± 50	ISO 2555
Gel Time ⁽²⁾ , min (25 °C)	15.0 ± 5.0	ISO 2535
Solid Content, %	62.0 ± 3.0	ISO 3233
Thermal Stability, h(80 °C)	≥24	ISO 584

PROPERTIES OF PURE RESIN CASTING

Property ⁽¹⁾	Value	TM
Tensile Strength, MPa	70 - 80	ASTM D638
Tensile Elongation, %	3.5 - 4.5	ASTM D638
Flexural Strength, MPa	120 - 130	ASTM D790
Flexural Modulus, GPa	3.3 - 3.6	ASTM D790
Barcol hardness	35 - 40	ASTM D2583
HDT (1.8 MPa), °C	85 - 90	ASTM D648
Limited Oxygen Index	≥ 35	ASTM D2863

(1) Typical property values only, not to be construed as specifications.

(2) Water bath at 25 °C, 100 g of resin was added with 1.5 % M-50 (AkzoNobel) and 1.0 % P001 (1 % cobalt content cobalt octoate solution).

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 6 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

A Material Safety Data Sheet of this product is available on request.

TEST METHODS

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.

SINO POLYMER CO., LTD.

NO. 130, Muhua Road, Shanghai Chemical Industry Park, 201507
Shanghai, China

Phone: +86 21 64252619

Email: huachang@hchp.com.cn