



MFE 790 is a polyurethane-modified epoxy vinyl ester resin, which has the improved mechanical properties, tensile properties and increased flexibility along with exceptional impact resistance benefits. It is developed for structural composites applications, it also offers similar corrosion resistance like MFE 791.

FEATURES

- Impact resistance is 500, higher than normal flexible vinyl ester resins
- Higher tensile elongation than MFE 791
- Good processability (reactivity and impregnation)

APPLICATIONS

- Suitable for most of the common application technologies associated with fiber reinforced plastic process

LIQUID RESIN PROPERTIES ⁽¹⁾

Property	Value	TM
Appearance	Light brown liquid	Visual
Viscosity, cps (25 °C)	400 ± 100	ISO 2555
Density, g/cm ³	1.21 ± 0.02	ISO 1675
Solid Content, %	60.0 ± 3.0	ISO 3233
Shelf Life ⁽²⁾ , Dark (25 °C)	6 months	

PROPERTIES ⁽¹⁾ OF PURE RESIN CASTING

Property	Value	TM
Tensile Strength, MPa	50 - 65	ASTM D638
Tensile Modulus, GPa	3.3 - 3.6	ASTM D638
Tensile Elongation, %	3.5 - 3.5	ASTM D638
Flexural Strength, MPa	120 - 140	ASTM D790
Flexural Modulus, GPa	3.4 - 3.7	ASTM D790
Barcol hardness	38 - 42	ASTM D2583
HDT (1.8 MPa), °C	70 - 80	ASTM D648

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

(2) Unopened drum with no additives, promoters, accelerators, etc. added. Shelf life specified from date of manufacture Typical values only, should not be considered as product specifications

MFE ® 790

TESTING CONDITIONS

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

PACKING

Net weight 20 Kg / iron drum, 200 Kg / iron drum, 1000 Kg / IBC tank.

STORAGE

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