



1 CHARACTERISTICS

The resin **MFE 711** is based on Bisphenol-A- Epoxy Resin diluted in styrene. The resin provides resistance to a wide range of acids, alkalis, bleaches and solvents used in many chemical processing industry applications.

- The resin polymerise at room temperature following addition of Cobalt solution and catalyst like Methyl Ethyl Ketone peroxide.
- The resin is developed for FRP storage tanks, vessels, ducts, and on-site maintenance projects, particularly in chemical processing and pulp and paper operations.
- The resin has shorter gel-to-cure interval so can reduced stress cracking.
- When properly formulated and cured, complies with FDA regulation 21 CFR 177.2420, covering materials intended for repeated use in contact with food.

2 PROPERTIES OF THE LIQUID RESIN

Appearance	Clear liquid
Brookfield viscosity (ISO 2555 - 25°C - sp3)	500 - 700 mPa.s
Non volatile content (ICON 003)	52 - 58%
Gel time (ICON 002) (25°C - 0.15% Co 12% - 1.2% MEKP on 100 g)	13 - 25 minutes
Peak time (25°C - 0.15% Co 12% - 1.2% MEKP on 100 g)	20 - 35 minutes
Exothermic peak* (25°C - 0.15% Co 12% - 1.2% MEKP on 100 g)	145 - 170°C

*Measure realised at free air.

3 MECHANICAL PROPERTIES* ON BASIS RESIN**

Tensile strength (ASTM D 638)	80 - 95 MPa
Tensile modulus (ASTM D 638)	3,2 - 3,7 GPa
Flexural modulus (ASTM D 790)	3,3 GPa
Flexural Strength (ASTM D 790)	120 - 150 MPa
Elongation at break (ASTM D 638)	5,0 - 6,0 %
Heat distortion temperature*** (ASTM D 648 Method A)	100 - 106 °C
Barcol hardness* (ASTM 2583)	38 - 42

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

(**) Cure schedule: 24 hours at room temperature; 2 hours at 120 °C

(***) Maximum stress: 1.8 MPa

Catalysis: 100 g Resin + 1,8 ml of Cobalt 1 % + 1,2 ml MEKP 50 (Butanox M 50)

IMPORTANT

All of the results obtained according to trials in our laboratory. However, we don't be responsible of manufactured parts with the resin **RVI MFE 711 NPA**, if the application conditions specified are not respected.

It is imperative that the user must also ensure that his application and his process are appropriate for this product to be used. We hereby the conformity of our products with the above specifications. We cannot be responsible for any damage caused by misuse of this product or use of the product for an application not covered in the design.



4 VERSIONS

Versions with different characteristics:

	RVIMFE711VNPA
Description	Non pre-accelerated Infusion
Brookfield viscosity (ISO 2555 - 25°C)	50 rpm: 270 - 290 cP
Gel time (ICON 002) (25°C - 1.5% PMEC M50 on 100 g)	+ 0,05% Co12% 45 - 50 minutes

5 RECOMMENDATIONS BEFORE USE

- Mix the **MFE 711** well before use.
- Mix the peroxide very well, never put less than 1.25% and more than 2.5% of MEKP.
- Before use, check that the temperature of the product and the room is between 18°C and 25°C.
- **Do not mix together the accelerator and the catalyst, add separately inside the resin.**
- To obtain a homogeneous polymerization, mix the cobalt well for 10 minutes after add and mix the catalyst well before use.

6 PACKAGING

Available in kegs of 25 kg and in drums of 225 kg.

7 CONDITIONS DE STOCKAGE

Storage life: **RVI MFE 711** resin is stable for 6 months from date of production. The product must be stored in original closed packaging at a temperature between 15°C and 25°C, away from direct sunlight.

It is the responsibility of the customer to assure that the product is used in good conditions overall before the date limitation mentioned on the keg.

This resin is subject to the Highly Flammable Liquids Regulations.

IMPORTANT

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