



# MapeWrap 31 SP

Medium viscosity epoxy resin for impregnation of MapeWrap with "dry system"



## WHERE TO USE

**MapeWrap 31 SP** is used for the impregnation of **MapeWrap C** or **G UNI-AX, BI-AX** and **QUADRI-AX** fiber reinforcement sheet for use in external structural repair, strengthening and upgrade applications.

## TECHNICAL CHARACTERISTICS

**MapeWrap 31 SP** is a gelatinous solvent-free epoxy resin based adhesive specially developed in the MAPEI research laboratories for the impregnation of **MapeWrap** fabric.

**MapeWrap 31 SP** is made up of two pre-dosed components (Part A = resin and Part B = hardener) that must be mixed together before use. After having mixed the two parts together, **MapeWrap 31 SP** remains workable for approximately 60 minutes at +30°C.

Once hardened, **MapeWrap 31 SP** acquires excellent dielectric properties and high mechanical strength.

## RECOMMENDATIONS

- **MapeWrap 31 SP** must not be used once the hardening reaction begins.
- Apply **MapeWrap 31 SP** over the still fresh **MapeWrap 11** or **MapeWrap 12**.

## DIRECTIONS FOR USE

### Preparing MapeWrap 31 SP

Mix the two components of **MapeWrap 31 SP** together.

Pour Part B into Part A and mix with a slow speed drill fitted with a stirrer until the resin is completely homogeneous.

Mix ratio: 75 parts by weight of Part A and 25 parts by weight of Part B. Do not use partial quantities. To avoid the risk of accidental ratio errors, use the whole package.

Applying MapeWrap 31 SP and placing the MapeWrap C or G UNI-AX, BI-AX or QUADRI-AX fiber reinforcement sheets  
Apply a uniform first coat of **MapeWrap 31 SP** over the still fresh **MapeWrap 11** or **MapeWrap 12**, with a brush or with a short bristle roller. Immediately apply the fabric making sure it is laid without wrinkles.

After having flattened the fabric wearing protective rubber waterproof gloves, apply over the **MapeWrap C** or **G** fabrics a second coat of **MapeWrap 31 SP** by brush or roller. Press it several times using a stiff rubber roller so the adhesive can completely penetrate through the fibres of the fabric.

Pass over the impregnated fabric with an aluminium roller with a worm screw in order to completely

# MapeWrap 31 SP

eliminate any air bubbles formed during the application.

Precautions to be observed before application

No special precautions need to be taken at temperatures between +5°C and +35°C. In hot weather do not expose the material to direct sunlight and bonding should be carried out during the cooler hours.

During the winter, if applications need to be carried out outdoors at temperatures below +5°C, it is recommended that before repairing or reinforcing with **MapeWrap** fabrics, warm the substrate 24 hours before bonding and arrange for having adequate insulation systems in order to avoid any danger of frost. The thermal insulation should be maintained for at least the next 24 hours. Before use, store the product in a heated area.

## SAFETY MEASURES TO BE OBSERVED FOR THE PREPARATION AND APPLICATION OF THE PRODUCT

**MapeWrap 31 SP**, Part A is irritant in direct contact with the eyes and skin. Part B is a strongly caustic and corrosive substance. After repeated and prolonged contact, sensitivity of the skin could be caused.

Avoid contact with skin and eyes by always wearing protective gloves and goggles while mixing and applying the two components.

In case of contact with the skin, wash with plenty of water and soap and if there should be any sensitivity of the skin, consult a doctor. In case of contact with the eyes, wash with running water and consult a doctor. Use in ventilated areas.

### Cleaning

Due to the strong adhesion of **MapeWrap 31 SP** also on metal, it is recommended to wash the working tools

with solvents (ethyl, alcohol, toluol) before the product dries.

### COVERAGE

Coverage depends on the type on fabric (unidirectional, bi-directional and quadri-directional) and the height:

estimated coverage is 950 g /m<sup>2</sup> based on presaturation of 900 g fiber sheet.

### PACKAGING

5 kg units  
(Part A = 3.75 kg, Part B = 1.75 kg);

20 kg units  
(Part A = 15 kg, Part B = 5 kg).

### STORAGE

The product must be stored in original sealed packaging in temperatures not lower than +5°C.

### FOR PROFESSIONALS.

### WARNING

*N.B. - Although the technical details and recommendations contained in this product report correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical applications: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.*



Application phase



Application phase

All relevant references of the product are available upon request



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