



A high chemical-resistant, high wearing-resistant Vinyl Ester lining and coating material

## WHERE TO USE

**Mapecoat VE 825 AP** is a non-promoted and unwaxed, Bisphenol A based Vinyl ester resin designed for use in the tropics. It exhibits high tensile strength and is developed for heat and corrosion resistant composite applications.

## **Application examples**

- Chemical spillage areas
- Chemical storage
- Petrochemical industry
- Pits
- Wastewater treatment tanks

## BENEFITS

- Rapid installation
- High chemical resistance
- Cold temperature resistance

## **TECHNICAL CHARACTERISTICS**

**Mapecoat VE 825 AP** is suitable for use on a wide range of substrates with varying service requirements. Specific recommendations can be obtained upon request.

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### RECOMMENDATIONS

## Do not apply Mapecoat VE 825 AP:

- to wet or damp surfaces;
- to dusty, crumbly or uneven surfaces;
- after the pot-life time

## **APPLICATION PROCEDURE**

## **Substrate Requirement**

The substrate must be solid, mechanically strong, perfectly clean, and free of crumbling parts and standing water.

It must be sufficiently cured and have completed most of the shrinkage phase. Preparation may be carried out by sand-blasting, shot-blasting or grinding, according to the condition of the substrate and the successive applications.

The concrete substrate must be strong and sound with a minimum compressive strength of 25 N/mm<sup>2</sup> and pull of strength of  $1.5 \text{ N/mm}^2$ .

#### Primer

Apply **Primer SN** or **Mapecoat VE 825 AP** by roller at a rate of 0.1-0.3 kg/m<sup>2</sup> depending on the substrate condition. Allow to dry for 8-12 hours for **Primer SN** or minimum 1 hour for **Mapecoat VE 825 AP** prior to the lamination of any glass fiber material.

#### Recoating Mapecoat VE 825 AP

Touch Dry	: 1 hour at 25°C
Minimum Re-coating Time	: 1 hour at 25°C



#### Mixing

Mix component A with component B (1-3%) using a slow speed (300-400 rpm) electric drill fitted with a paint mixer. Pour component B into Part A and continue to mix for 2-3 minutes. Do not mix more than the required amount which can be applied within the stipulated pot life.

It is recommended not to mix more than one pack of **Mapecoat VE 825 AP** in a single container.

### **Application Method**

Apply evenly to the entire surface using either brush, or short or medium haired roller.

## Laminating

Apply **Mapecoat VE 825 AP** with trowel or by roller at a rate of 1.0 -1.5 kg/ m<sup>2</sup> depending on the glass fiber matt thickness. Allow to dry for 1 hour before applying the second glass fiber matt or glass fiber tissue. Apply **Mapecoat VE 825 AP** onto the glass fiber tissue by trowel or press by steel roller to remove air entrapment at a rate of 0.300 - 0.500 kg/m<sup>2</sup> depending on the glass fiber tissue thickness and density.

## **Finishing coat**

Apply coloured **Mapecoat VE 825 AP** with trowel or by roller at a rate of 0.200-0.300 kg/m<sup>2</sup> depending on the glass fiber tissue roughness. Allow to dry for 1 hour before applying the second coat of **Mapecoat VE** 825 AP.

#### Note:

**Mapecoat VE 825 AP** resin reaches its final physical properties in terms of compressive strength, final adhesion etc. after a post-reaction period which may last several days.

## STORAGE

The product **Mapecoat VE 825 AP** can be stored for 6 months in its original packaging in a dry place and at a temperature of  $+5^{\circ}$ C to  $+35^{\circ}$ C.

### PACKAGING

Component A: 20kg and 200 kg drum Component B: 1kg and 5kg bottle

## SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

**Mapecoat VE 825 AP** irritate if they come into contact with the eyes or skin. If the product comes into contact repeatedly with the skin, while working, it may cause rashes.

While handling and mixing the various components, avoid contact with the eyes and skin and always use protective gloves and goggles when preparing and applying the product. Only apply the product in well ventilated areas. In case of accident, seek medical care. Avoid release to the environment.

For further and complete information about a safety use of our product, please refer to our latest version of the Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

## WARNING

Although the technical details and recommendations contained in this product data sheet 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 application: 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.

Please refer to the current version of the Technical Data Sheet, available from our website: www.mapei.com.sg

All relevant references for the product are available upon request

# **TECHNICAL DATA (typical values)**

PRODUCT IDENTITY		
Colour	Comp A: transparent yellow	Comp B: neutral
Appearance:	liquid	liquid
Density (kg/m³):	1050	1140
Viscosity (mPa.s):	550	20
Shelf-life:	6 months in its original unopened packaging at +35°C	
APPLICATION DATA (AT +23°C & 50% R.H.)		
Mixing Ratio:	Comp. A : Comp. B = 100 : 1 - 3	
Colour of mix:	transparent purple	
Consistency of the mix:	fluid	
Density (kg/m³):	1050	
Viscosity (mPa.s):	550	
Substrate temperature relative to dew point:	> 3°C above dew point	
Recommended application temperature range:	from +18°C to +35°C	
Pot-life:	at 23°C, 10-15 minutes at 30°C, 3-5 minutes	
FINAL PERFORMANCE (AT +23°C & 50% R.H.)		
Dry to the touch:	1 hour	
Set to light-foot traffic:	24 hours	
Final hardening time:	3-7 days	
Shore hardness (Shore D):	85	
Peak exotherma/temp. (°C)	125	
Number of coats:	2	
Flexural modulus ASTM D-790/ISO 178 (kg/mm²)	700	
Flexural strength ASTM D-790/ISO 178 (kg/mm²)	16	
Tensile strength ASTM D-638/ISO 527 (kg/mm²)	14	
Working Temperature:	-196 °C to 104 °C	



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