



The Chemical Company

# Mbrace® PRIMER

Unique moisture tolerant epoxy primer for the Mbrace Composite Strengthening System

## DESCRIPTION

The **Mbrace Primer** is a clear, low viscosity, 100% solids epoxy compound based on a unique adduct curing technology. The technology results in superior tolerance for surface moisture, curing at temperatures as low as 2°C and stability to cure in the presence of moisture.

**Mbrace Primer** is tolerant to a wide variety of field conditions. When applied to concrete, the surface is upgraded to give high tensile bond strength to the system being used.

## FIELDS OF APPLICATION

### RECOMMENDED FOR

Application on all prepared concrete surfaces for installing Mbrace Composite Strengthening System.

## FEATURES AND BENEFITS

|                           |  |
|---------------------------|--|
| <b>Clear</b>              | Non staining   |
| <b>Adhesion promoting</b> | Improves adhesion of subsequent coatings to substrates |

## TYPICAL PERFORMANCE DATA

|   |         |
|---|---------|
| Adhesion strength on glass fibre, N/mm <sup>2</sup> (ASTM D4541:95e1) | : 2.62  |
| Adhesion strength on carbon, N/mm <sup>2</sup> (ASTM D4541:95e1)      | : 2.87  |
| Tensile strength, MPa (ASTM D638:00)                                  | : 35    |
| Tensile strain at yield, % (ASTM D638:00)                             | : 1.8   |
| Tensile modulus, MPa (ASTM D638:00)                                   | : 2,097 |
| Flexural strength, MPa (ASTM D790:01)                                 | : 55    |
| Flexural modulus, MPa (ASTM D790:01)                                  | : 1,672 |
| Compressive strength, MPa (ASTM D695:96)                              | : 73    |
| Compressive modulus, MPa (ASTM D695:96)                               | : 2,320 |

## PROPERTIES

Generic Type : 100% solids amine-cured liquid epoxy.

|        |        |       |
|--------|--------|-------|
| Colour | Part A | Amber |
|        | Part B | Clear |
|        | Mixed  | Amber |

VOC Content (SS5: Part B2) : 3.22% from test 1.49%

### Flash point (Pensky-Martens closed cup)

Primer Part A & Part B : 95°C

Mixing ratio : 3 to 1 (Part A to Part B) by volume  
: 100 to 60 (Part A to Part B) by weight

|               |        |           |
|---------------|--------|-----------|
| Weight/Volume | Part A | 1.139 g/L |
|               | Part B | 1.096 g/L |
|               | Mixed  | 1.120 g/L |

|                 |             |           |
|-----------------|-------------|-----------|
| Mixed viscosity | Temperature | Viscosity |
|                 | 10°C        | 200 cps   |
|                 | 25°C        | 400 cps   |
|                 | 32°C        | 1,200 cps |

|                                    |             |          |
|------------------------------------|-------------|----------|
| Working Time, based on 3.8L sample | Temperature | Pot-Life |
|                                    | 25°C        | 70 min   |

## APPLICATION

### Surface Preparation

Proper substrate preparation is critical for optimum performance. The prepared surface should be structurally sound and free from contaminants such as oil, grease, curing membrane, previous coatings, dust, fungus, mass, etc.

Depending on the substrate condition and environmental requirements, use an effective method recommended by ICRI Guideline No. 03732 for selecting and specifying concrete surface preparation for sealers, coatings and polymer overlays.

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# MBRACE<sup>®</sup> PRIMER

## Primer

### Mixing

3 volumes of **Mbrace Primer** Part A to 1 volume of **Mbrace Primer** Part B. Blend with a mechanical mixer for at least 3 minutes or until it is homogeneous. Mixing time may be adjusted according to the temperature during application.

### Placing

Apply the **Mbrace Primer** to the intended substrate using a brush or short nap roller. Spray application of **Mbrace Primer** is not recommended.

## ESTIMATING DATA

Concrete : 0.15-0.25 kg/m<sup>2</sup>

Coverage may vary depending on the density, texture and porosity of concrete

## PACKAGING

**Mbrace Primer** is supplied in 1 kg and 5 kg packs with the individual weights of the components as below:

|        | 1 kg set | 5 kg set |
|--------|----------|----------|
| Part A | 0.625 kg | 3.125 kg |
| Part B | 0.375 kg | 1.875 kg |

## SHELF LIFE

**Mbrace Primer** can be kept for 12 months from date of manufacture if stored in original unopened packaging, in a dry enclosed place at temperatures at 21°C without exposing to direct sunlight.

## PRECAUTIONS

**Mbrace Primer** contains reactive resins and diluents. Observe the following health and physical precautionary measures before using this product.

Wear gloves, mask, eye protection, barrier creams and appropriate work clothing while handling the product. Wash thoroughly after handling. Should skin contact occur wash immediately with soap and water, or an effective hand cleaner. In case of accidental eye contact wash with copious quantity of water and seek medical help immediately. If ingested, do not induce vomiting. Consult doctor immediately. Ventilation is required with special consideration for enclosed or confined areas.

Air movement must be designed to ensure turnover at all locations in work and adjacent areas to avoid build up of heavy vapours.

For detailed Health, Safety and Environmental Recommendations, please refer and follow all instructions on the product Material Safety Data Sheet.

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## STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this **BASF Construction Chemicals** publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

## NOTE

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