

# MonniMax EP

## Epoxy Thixotropic Adhesive for Structural Gluing

### Product Description

MonniMax EP is an epoxy adhesive which consists of two components. It is solvent free, with thixotropic effect. Once the two components are mixed, the product becomes easily applicable on both horizontal and vertical surfaces. It adheres perfectly to a variety of supports and has an excellent mechanical resistance.

MonniMax EP hardens in a short time without shrinkage and emission of volatile substances.

### Uses

MonniMax EP is used for structure gluing in building industries such as:

- ▶ Concrete
- ▶ Natural or artificial stones
- ▶ Bricks
- ▶ Marble and granite Metals
- ▶ Wood
- ▶ Rigid PVC

MonniMax EP can be also used for the structural repairs of beams and pillars, steel plates gluing, filling large cracks in industrial floorings. It is also used in floors under heavy traffic or chemical aggression, and for repairing edges and rigid structural gluing of prefabricated concrete elements.

### Advantages

- ▶ Solvent free
- ▶ Superior moisture and chemical resistant
- ▶ Superior durability and toughness
- ▶ Enhanced structural appearance - protrusions and punctures eliminated
- ▶ High peel and shear strength properties

### Usage Instructions

#### Surface Preparation

Surface must be perfectly clean, compact and dry. Loose particles, varnishes, traces of grease must be eliminated through sand blasting or stiff brushing before the application of MonniMax EP.

New concrete or cementitious surfaces should be allowed to cure and have moisture content not exceeding 5%. Old or existing floor should be refurbished mechanically to ensure clear sound substrate.

Concrete supports must be cured for at least 21 days to avoid tension due to hydrometric shrinkage.

#### Priming

Highly porous substrates or substrates containing micro silica will require priming with MonniPrime E, a solvent based epoxy primer.

#### Mixing

MonniMax EP is supplied in two pre-weighed packs (Component A – Base and Component B – Hardener) which are ready for immediate in-situ use.

Stir in both components before use. Transfer the entire contents of component B (Hardener) into the component A (Base) can and mix with low speed drill and paddle at a speed of 200 – 300 rpm for 2 – 3 minutes till obtaining a mix with uniform consistency. Scrape the sides and bottom of the can during mixing to ensure homogeneity.

#### Application

MonniMax EP should be applied with smooth spatula or trowel in order to achieve maximum adhesion between both surfaces.

After spreading the mix, unite both elements and maintain them tight until MonniMax EP hardens completely.

The optimum thickness to have a good adhesion is about 1 to 2 mm.

#### Cleaning

Tools and equipment should be cleaned with SOLVENTE 10 from Colmef immediately after use. Hardened material should be removed mechanically.

## Technical Data

Category	Typical Values
Component A	Dense paste
Appearance	White
Color	
Density at 25°C	1.6 – 1.8 kg/L
Component B	Dense paste
Appearance	Black
Color	
Density at 25°C	1.6 – 1.8 kg/L
Mixed Product Properties	1 : 1
Mixing Ratio	Grey
Color	Thixotropic dense
Consistency	paste
Mix Density	1.7
Solid Content	100%
Pot life time of mixture	90 minutes at 30°C
VOC	11.0 g/L
Compressive strength (ASTM 579)	65 N / mm <sup>2</sup>
Flexural Strength (ASTM C580)	44 N/mm <sup>2</sup>
Tensile strength (ASTM C307)	30 N / mm <sup>2</sup>
Bond strength (AST D4541)	2.5 N/mm <sup>2</sup>
Water absorption (BS EN12390)	<0.05%
Joint Shear strength (ASTM D 3163)	50 N/mm <sup>2</sup>
Complete hardening	7 days at 30°C
Temperature of application	+5°C to +35°C

All values are subject to 5-10 % tolerance

Category	Typical Values
Breakdown flexure test between prisms of concrete glued with MonniMax EP	Breakdown of concrete at 100%
Breakdown flexure test between concrete and steel glued with MonniMax EP in the interior part	Breakdown of concrete at 100%
Breakdown cut test concrete elements glued with MonniMax EP	Breakdown of concrete at 100%

(Test performed on concrete class 500 cured for 28 days, with light sand blasting and application of MonniPrime E on the glued part.)

### Consumption

1 m<sup>2</sup>/Liter / 1 mm thickness

### Packaging

MonniMax EP is supplied as a two component 4 Liter Kit.

### Shelf Life & Storage

The product must be stored in dry covered shed at a temperature between 10°C and 30°C in original packing. If stored as above, the product will have a shelf life of 12 months.

### Health & Safety

During application, wear appropriate protective clothing, goggles, gloves and respiratory equipment if necessary.

In case of contact with skin, rinse with water and again wash thoroughly with soap and water. In case of contact with eyes, rinse with plenty of water and seek medical advice accordingly.

## Legal disclaimer

Monneli endeavors to ensure that any advice, recommendations, information it may give, is accurate and correct. It cannot accept any liability either directly or indirectly arising from the use of its products, because it has no direct or continuous control over where or how its products are applied, whether or not in accordance with any advice, specification, recommendation or information given by us. Monneli has the right to change any of the specifications mentioned in the Technical data sheets upon its discretion without prior notification. Hard copies of TDSs are printed once or twice a year, while our technical data sheets are continuously being updated as per R&D improvements and new 3rd party testing; kindly refer to our website for the latest updated TDSs.

VER.1.2019