



# MC-Solid 1331 BM

(Formerly Known as MC-DUR 1331BM)

## Solvent Free Two Component Thixotropic Epoxy Based Segment Adhesive

### Product Properties

- Thixotropic grade Epoxy Adhesive
- High Bond Strength
- Solvent free
- Good Spread ability Under pressure
- Confirms to FIP standard
- Easy to mix and water tight
- Virtually Shrinkage free
- High Mechanical strength
- Easy to apply, Trowel able

### Areas of Application

- Bonding of Precast segments in bridges, Tunnels, etc
- For General bonding of different building materials on vertical faces (Concrete, Steel Stones, Iron, wood, etc)
- For leveling of Vertical and overhead surfaces
- For repair and corners and joint edges
- Epoxy for filling tie-rods, dowel holes

### Application Notes

#### General

**MC-SOLID 1331BM** is specially formulated, solvent free, thixotropic grade of epoxy for bonding of vertical elements and precast segments in bridge construction to provide a water tight structural joint. **MC-SOLID 1331BM** hardens without shrinkage. **MC-SOLID 1331BM** possesses high bonding and high modulus of elasticity.

#### Surface preparation

The surface to be applied must be clean, free of dust, laitance, loose particles, contamination and curing compound residues, The minimum concrete compressive strength necessary should be >25 N/mm<sup>2</sup>, substrate pull off strength of 1.5 N/mm<sup>2</sup> is required. Please refer to our General application Guideline for more technical information.

#### Mixing

**MC-SOLID 1331BM** is supplied in two packs – Resin and Hardener-Ready to use for easy on-site mixing. Empty the base and hardener completely by scraping sides of the can into a container and thoroughly mix for 2 to 3 minutes using a slow speed electric drill with a paddle attachment to obtain a homogeneous consistency. To complete the mixing the mixture is poured from one can to another and mixed again to ensure homogeneity.

When used as a segment bonding adhesive, hand mixing is not suitable. Depending upon thickness of adhesive, the thixotropy can be also controlled by addition of suitable fillers.

The adhesive is applied to the prepared surface of segments to both faces by means of suitable trowels, spreaders or spatulas to either one or both surfaces. Jointing should be done with the open time and pot life of the adhesive.

The faces of both segments are brought together and the joint closed immediately and the excess material from the joints is removed using a scraper. Similar methodology can be used to fill dowel holes and install dowels or tie-rods.

**MC-SOLID 1331BM** is supplied in three grades

Product	Temp (°C)	Pot Life	Open time
MC-SOLID 1331BM Type-I	5 to 20	30min @20°C	60 min @20°C
MC-SOLID 1331BM Type-II	15 to 30	30min @30°C	60min @30°C
MC-SOLID 1331BM Type-III	25 to 40	30min @40°C	60min @40°C

Coverage rates of **MC-SOLID 1331BM** are dependent on texture, temperature and porosity of the substrates as well as product storage and application temperatures. Higher temperatures shorten pot life, whereas lower temperatures will extend it. The general rule of thumb is that a temperature change of ±10°C halves or doubles the pot life of the epoxy. All the tools and tackles will be cleaned by using MC-Reinigungsmittel U solution. If it hardened then it should be removed mechanically.



#### Technical Data For MC-SOLID 1331BM

Characteristic	Unit	Value*	Comments
Specific Gravity		1.85	±0.05 at 30 <sup>o</sup> C
Compressive Strength	N/mm <sup>2</sup>	>60 >75	At 1 Days as per FIP 5.6 Standard At 7 Days as per FIP 5.6 standard
Tensile Bending strength		Concrete Failure	On concrete at 7 Day
Shear Strength	N/mm <sup>2</sup>	>12	At 7 Days as per FIP 5.15 standard
Squeezability	mm <sup>2</sup>	>3000	
Coverage	M <sup>2</sup> /pack	1.63	At 2mm thickness

#### Product Characteristics for MC-SOLID 1331BM

Type of product	Solvent free Thixotropic Bonding Epoxy
Form	Resin and hardener
Colour	Grey (Mixed Material)
Shelf life	12 months from the date of manufacture
Delivery	6 kg packs
Storage	In unopened Packaging, Protect from Rain, Direct Sunlight, Heat and Frost
Disposal	Empty Packs completely and dispose off carefully to protect our environment

#### Safety Advice

Please Take notice of the safety information and advice given on the packaging labels, safety information sheets and General Application Advice.

**Note:** - The information on this Data Sheet is based on our experiences and correct to the best of our knowledge. It is However, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our Data refers to the accepted engineering rules, which have to be observed Soliding application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are binding if given in written form. The accepted engineering rules must be observed at all times.

**Edition:** - MC/IND/R0/MAY2020, Some Technical Changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.