

# METZ 15VE-MORTAR

## VINYL ESTER CEMENT



### DESCRIPTION:

Metz 15VE-Mortar is a two-part cement based on an epoxy novolac vinyl ester resin, which is used for bonding acidproof bricks and tiles. Metz 15VE-Mortar provides excellent resistance to oxidizing chemicals such as chlorine dioxide and hypochlorite solutions as well as many acids, alkalis and solvents at temperatures up to 150°C.

### FEATURES AND BENEFITS:

- High Chemical Resistance  
Resistant to strong oxidizing agents, alkalis, solvents and bleaches. Good resistance to Nitric Acid, for full details refer Metz Chemical Resistance Chart.
- High Temperature Resistance  
Resistant to temperatures up to 150°C.
- High bond, Tensile and Compressive Strengths
- Low absorption and shrinkage. Low styrene content.
- Fast Setting  
Initial set in one hour at 20°C
- Quality Accreditation  
The management system governing the development and manufacture of this product is proudly ISO9001:2015 certified.

### RECOMMENDED:

As a bonding cement for acid brick and tile installations:

- Pulp and Paper Mills
- Acid Plants
- Fertiliser Plants
- Oil Refineries
- Steel Mills
- CIP rooms in food and beverage plants
- Solvent extraction processes

### NOT RECOMMENDED:

- For long term immersion in concentrated oxidizing acids. Refer Metz 7K.

### PHYSICAL PROPERTIES:

(Typical Values)

Density g/cm <sup>3</sup>	1.9-2.0
Compressive Strength MPa	84
Adhesion to brick MPa	>2.1 (brick failure)
Maximum Service Temperature °C	150
Tensile Strength MPa	15.4
Modulus of Elasticity MPa	13,300
Shrinkage %	0.3

### COVERAGE: Theoretical quantity (allow for wastage)

For fully bonding Acid Brick, 220 x 105 x 75 mm (3mm joint)	0.3 kg per brick
For fully bedding and jointing tiles, 240 x 115 x 30 mm (6mm joint)	1.5 kgs per square metre
For jointing tiles, 240 x 115 x 20 mm (6mm joint)	3 kgs per square metre

### INSTRUCTIONS FOR USE

#### 1. Temperature of Working Area

For optimum results, maintain a temperature of between 15 - 30°C on air, substrate and components during mixing, application and curing.

At temperatures below 15°C, the application becomes more difficult and curing is retarded.

At temperatures above 30°C, initial set will take place too rapidly. This difficulty can be overcome by mixing in a cooler area or by cooling the components.

#### 2. Surface Preparation

All surfaces must be clean, dry and free from oil, grease, water and other contaminants which may inhibit bond.

#### 3. Mixing

##### a) Equipment:

Mechanical mixing is recommended. A low speed mixer or a heavy duty drill with an appropriate mixing paddle are suitable. Small quantities can be mixed by hand, using a trowel.

b) A pre-weighed pack of 15VE-Mortar promoter is supplied. This should be added to 20kgs of 15VE liquid and mixed thoroughly. Note that promoted 15VE liquid has a limited shelf life.

c) Proportions: 

	By Weight	By Volume
15VE-Mortar Liquid (promoted)	1	1
15VE-Mortar Powder	3.25	2.8

Powder proportion may be altered by ±10% to suit requirements.

For application in cold climates, an accelerator may be added to assist curing. Contact Metz for details.

##### d) Mixing Procedure:

Place measured quantity of liquid in mixing container. Add powder gradually while mixing continuously until mortar is uniformly blended.

Do not leave mixed material in a thick mass as this will greatly decrease the pot life.

Spread freshly mixed material thinly in a shallow tray.

Material which has begun to set must be discarded.

##### e) Pot Life at 20°C:

Approximately 25 minutes.

##### f) Clean Up:

Mixing equipment, tools, etc. can be cleaned with Metz Cleaner, acetone or M.E.K. prior to initial set of cement.

#### 4. Installation

##### a) Masking of Floor Tiles

If appearance of this finished floor is important, tiles should first be coated with Metz Masking Compound. Note this is normally not required for industrial applications. Remove 24 to 48 hours after application using warm water and a scrubbing machine.

##### b) Application

Usually Metz 15VE-Mortar will be used to bed and joint acid bricks and tiles over a rubber or Metz membrane. For other applications consult Metz.

Apply using appropriate trowel by the bricklayers method. Ensure that bricks/tiles are fully covered with Metz 15VE-Mortar and are beaten into place with joints 3 to 4mm in size.

If only grouting tiles a wide joint will be required and application would be either by trowel or gun. Ensure joints are flush and Metz 15VE-Mortar fully fills the depth of the joint. Remove excess material with Metz Cleaner before setting.

##### c) Setting Time:

Initial set: 1 hour at 20°C

Final set: 24 hours at 20°C

##### d) Full Cure:

72 hours at 20°C

#### 5. Storage

Store under cover in sealed containers in dry conditions at temperatures between 5°C and 30°C. Under these conditions, shelf life is 6 months for powder and unpromoted liquid. Promoted liquid has a reduced shelf life and should be used within 1 month.

#### 6. Safety Precautions

##### a) Liquid:

Inflammable. Avoid formation of sparks.

Avoid contact with skin and eyes. Avoid breathing vapour.

Use barrier cream. Wear safety glasses and protective gloves. Ensure adequate ventilation.

If contact occurs, wash with copious amounts of water.

Seek medical attention.

##### b) Powder:

Avoid contact with skin and eyes. Avoid breathing dust.

Ensure adequate ventilation.

##### c) Cleaner:

Flammable. No smoking. Avoid formation of sparks.

Ensure adequate ventilation.

For fully safety precautions refer to the Safety Data Sheet for each component.

**Always ensure you have the latest data sheet version, refer [www.metz.net.au](http://www.metz.net.au)**

- The customer must comply strictly with the instructions contained in this product data sheet. Metz is not responsible for any advice or variations to this data sheet which are not confirmed in writing.
- If the customer has a claim against Metz in respect of any product supplied to the customer by Metz whether due to a fault in the product or the negligence or breach of contract by Metz or for any other reason:
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