# METZ 70 WATER WASHABLE CHEMICAL RESISTANT GROUT



#### **DESCRIPTION:**

Metz 70 is a three-part water washable, solventless, epoxy resin-based mortar specifically formulated for grouting ceramic floor tiles. It will adhere to damp surfaces and cure at low temperatures. Metz 70 is the recommended product to be used in commercial kitchens especially in critical areas eg under fryers when with a simple additive it can be used as a bedding adhesive.

#### **FEATURES AND BENEFITS:**

• Chemical Resistant

Resistant to dilute organic acids, such as lactic, acetic and citric, and to most floor cleaning compounds. Refer Metz Chemical Resistance Chart under "Epoxy A".

Strong Bond

Excellent adhesion to a wide variety of substrates.

Hygienic

Dense, impermeable surface, easily cleaned to prevent bacterial growth.

Bonds to Damp Surfaces

Ideal repair material for existing floors.

• Cures Under Adverse Conditions

Fully cures at temperatures as low as 5°C and relative humidity up to 100%.

Water Washable

Excess grout is easily cleaned from tiles and equipment by water, rather than solvents.

• Quality Accreditation

The management system governing the development and manufacture of this product is proudly ISO9001:2015 certified.

#### **RECOMMENDED:**

• Commercial & Industrial Kitchens

• Beverage Manufacture

• Restaurant, Hotel & Fast Food Kitchens

• Food Processing Plants

• Dairies & Milk Products Processing

• Chemical Industry

#### NOT RECOMMENDED:

For highly concentrated acids - refer Metz Chemical Resistance Chart for appropriate materials.

PHYSICAL PROPERTIES: (Typical Values)

Density:  $1.80 - 1.90 \text{ g/cm}^3$ 

Compressive Strength: 70 MPa
Tensile Strength: 20 MPa
Adhesion to Unglazed Ceramic 4.2 MPa

**COLOURS:** 

Standard Colours: Black and Grey

Other Colours: Manufactured to fulfill special orders.

COVERAGE: Theoretical quantities (allow for wastage)

• For 240mm x 115mm tiles - 6mm wide x 20mm deep joints 2.9kgs/square metre

• For 150mm x 150mm tiles - 6mm wide x 12mm deep joints

1.8kg/square metre

### APPLICATION TEMPERATURE:

The recommended temperature range for application of Metz 70 is 5°C to 35°C.

At temperatures below  $5^{\circ}\text{C}$ , curing may be inhibited and final technical properties may be affected.

At temperatures above 35°C, consistency and setting rates may be affected.

If necessary, consult Metz.



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#### INSTRUCTIONS FOR USE

#### 1. Temperature of Working Area

Maintain a temperature of between 5°C and 35°C on the Metz 70 components, brick or tile and substrate during mixing and application. Air temperature in the area where the Metz 70 is to be applied should also be between 5°C and 35°C. At temperatures below 5°C, Metz 70 will not cure properly. Consult Metz if temperature cannot be maintained above 5°C.

At temperatures above  $35^{\circ}$ C initial set will take place too rapidly. This difficulty can be overcome by mixing in a cooler area, or by cooling the mixing equipment with ice water, and by cooling the Metz 70 components.

#### 2. Surface Preparation

All surfaces to be jointed must be clean. Excess moisture should be removed. When rejointing a floor where previous jointing material has failed, the old material must be cleaned out thoroughly to a depth equal to at least twice the width of the joint. Joints should then be scrubbed with a strong detergent and water, and thoroughly rinsed. Excess water should then be removed with a wet vacuum.

#### 3. Mixing

Mix Liquid component with a slow speed drill for a minimum of 30 seconds and at least until all material is of consistent appearance.

a) Equipment

Mechanical mixing is recommended. A low speed resinous cements mixer or a heavy duty drill with a suitable mixing paddle can be used. Small quantities can be mixed by hand, using a trowel or spatula.

b) Mixing Proportions

	Grouting	Bedding
70 Liquid	1.9	1.9
70 Hardener	1	1
P1 Powder	10	7

When using Metz 70 for tile bedding, add up to 1% of Metz PT1 powder by weight of the P1 powder until desired consistency is achieved. Powder added will depend upon temperature and site conditions. The exact amount to be added is not critical provided notched adhesive does not readily slump after placement. A loose metric cup of Metz PT1 powder weighs approximately 20 grams.

Note: Decant materials directly into the mixing bucket on electric scale. Measuring by volume gives inconsistent results impacting product performance. The liquid to hardener ratios must not be altered under any circumstances

#### c) Mixing Procedure

Thoroughly mix liquid and hardener together first, in correct proportions. For tile bedding application, next slowly add Metz PT1 powder and mix thoroughly. Then add Metz P1 Powder gradually with constant stirring.

Note: Liquid to hardener ratio must not be altered under any circumstances. Powder proportion may be altered a maximum of  $\pm 10\%$  to suit requirements.

 d) Pot Life Approximately 40 minutes at 20°C.

e) Clean Up

Mixing equipment, tools, etc., can be cleaned with water, prior to initial set of cement.

Ensure you have the latest mixing instructions, refer www. metz.net.au for most current data sheet version.

#### 4. Installation

- a) Bedding Apply fresh Metz 70 bedding mix to substrate with suitable notch trowel and immediately set tiles in the bed. Use combination method to ensure full coverage. When fixing tiles with keyed backs, prefill keys with Mez 70 bedding mix.
- b) Jointing Ensure joints and tile edges are clean. Joint width should be 6mm nominal to enable joints to be completely filled. Joint depth should be equal to at least twice joint width. Apply mixed grout to joints by trowel. Ensure complete filling of the joints. Remove excess grout from tile surfaces with sponge or clean, absorbent material dampened with minimum amount of clean water before grout begins to set (usually within 20 minutes of applying). Do not leave grout for extended period of time before commencing cleaning off.

*Note:* Use of excess water when cleaning off will result in decreased hardness and chemical resistance of the joint surface. Surface may also discolour.

Any residual spots or film of Metz 70 can be removed from tile surfaces, mixing equipment, tools etc with methylated spirits, Metz Cleaner or other solvent prior to initial set of the grout.

c) Setting Time: 10 hours at 20°C.

d) Curing Time

Full cure 3 days at 20°C

Note: For typical kitchen environments, Metz 70 can be put back into service after 24 hours.

#### 5. Storage

Store in original, sealed containers in a cool, dry place under these conditions, minimum shelf life is 12 months.

### 6. Safety Precautions

a) Liquid and Hardener:

Avoid contact with skin and eyes.

Use chemical goggles, PVC gloves and barrier cream.

b) Powder:

Avoid breathing dust.

Use dust respirator and chemical goggles.

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

## Always ensure you have the latest data sheet version, refer www.metz.au

- 1. 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.
- 2. 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:
  - a) Metz shall not be liable for any loss or damage including consequential loss or damage or loss of profits arising thereby;
  - b) Metz may at its option replace the defective product free of charge to the customer or refund all payments made to it by the buyer in respect of the defective product; and the maximum liability of Metz shall be the cost of replacing the defective product.