

# METZ 11E

## WATER WASHABLE EPOXY GROUT



### DESCRIPTION:

Metz 11E is a water washable, three-part epoxy resin for grouting ceramic tiles. Metz 11E combines excellent adhesion and good chemical resistance with ease of application. Metz 11E can be used for joints between 2-6mm wide. Metz 11E can be used to adhere tiles, eg mosaic pool tiles.

### FEATURES AND BENEFITS:

- Chemically Resistant  
Resists dilute acids and alkalis, as well as salts, oils and fats. Has better chemical resistance than many other water washable epoxy grouts. Refer to Metz Chemical Resistance chart.
- High Bond Strength  
Excellent adhesion to tile and concrete surfaces.
- Hygienic  
Dense impermeable surface, easily cleaned to reduce bacteria growth.
- Easy to Use  
Excess grout is easily cleaned from tiles and equipment by water, rather than solvents. Long pot life.
- Safe Use  
Low potential for allergic reaction as commonly associated with other epoxies. No solvents required for clean up.
- Quality Accreditation  
The management system governing the development and manufacture of this product is proudly ISO9001:2015 certified.

### RECOMMENDED:

For grouting floor (f) and wall (w) tiling in the following areas:

- Food processing plants (w)
- Beverage manufacture (w)
- Dairy product processing (w)
- Swimming pools (f+w)
- Commercial kitchens (w)
- Fast food restaurants (w)
- Hospitals and Institutions (f+w)
- Pharmaceutical manufacture (w)
- Bathrooms (f+w)

For laying tiles in swimming pools especially mosaic tiles.

### NOT RECOMMENDED:

- For application at temperatures less than 10°C refer Metz 5NF
- For exposure to strong organic acids, oxidizing acids and solvents. Refer Metz 12P or Metz 6NF
- For service temperatures over 60°C refer Metz 5NF
- For floor areas not recommended above refer Metz 70 or Metz 5NF

PHYSICAL PROPERTIES:	(Typical Values)
Density:	1.85 - 1.95 g/cm <sup>3</sup>
Adhesion to Ceramic:	Greater than 2MPa
Adhesion to Concrete:	Concrete failure

COLOURS:	Standard colours	Mid Grey, Black, White
	Other colours	Manufactured to order.

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

For Jointing 240 x 115mm tiles - 6mm x 8mm joints	1.2 kgs/square metre
For Jointing 150 x 150mm tiles - 6mm x 12mm joints	1.9 kgs/square metre

Metz Wash Additive is provided - one 800g pack per large set of resin and hardener

### APPLICATION TEMPERATURE:

The recommended temperature range for application of Metz 11E is 10°C to 35°C.  
At temperatures below 10°C, curing will be inhibited and final technical properties may be affected.  
At temperatures above 30°C, consistency and setting rates may be affected.  
If necessary, consult Metz.



### INSTRUCTIONS FOR USE

#### 1. Temperature of Working Area

Maintain a temperature of between 10°C and 35°C on the Metz 11E components, brick or tile and substrate during mixing and application. Air temperature in the area where Metz 11E is to be applied should also be between 10°C and 35°C.

#### 2. Surface Preparation

All surfaces to be clean and dry  
Consult Metz if further details are required.

#### 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 lowspeed dough 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

	By Weight	By Volume
11E Liquid	3 parts	2.55 parts
11E Hardener	1 part	1 part
P11 Powder	16 parts	5.8-6.0 parts

e) Mixing Procedure - Thoroughly mix liquid and hardener together first, in correct proportions. Add powder gradually with constant stirring.

Note: Liquid to hardener ratio must not be altered under any circumstances. Powder proportion may be altered  $\pm 10\%$  to suit requirements. Vertical grouting will utilise more powder. Addition of excess powder can result in a porous joint.

f) Pot Life - Approximately 2 hours at 25°C. Pot life decreases with increase in temperature, and increases with decrease in temperature. Leaving the material in a large mass can generate heat and reduce pot life

g) Clean Up - Mixing equipment and tools can be cleaned with water prior to initial set of the grout.

h) Metz Wash Additive is available if required. Usage is 4g/L or 2 teaspoons/8L dissolved in clean potable water. Metz supplies one 800g pack for a minimum of 1 x 100kg standard kit (1 x 15kg 11E Liquid, 1 x 5kg 11E Hardener, 4 x 20kg P11 Powder).

#### 4. Installation

Ensure joints and tile edges are clean. Joint width should be minimum of 2 to 6mm nominal to enable joints to be completely filled. Joint depth should be equal to at least joint width. Apply mixed grout to joints by trowel or caulking gun. 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 45 minutes of applying).

NOTE: Use of excess water when cleaning off will result in decreased hardness and chemical resistance and discolouration. For vertical applications especially with wider joints the use of Metz PT Powder will thicken the material to help prevent sagging. Refer the Metz PT Powder data sheet for usage instructions.

Do not mix more Metz 11E than can be used in 20 minutes at 20°C. Do not use on Metz 11E which has reached the end of its pot life.

Sets in 24 hours @ 20°C

Cures slowly, allow 3 weeks before immersion in pool water. If pool is exposed to rain such that grout is underwater any such underwater time must be added to cure time.

#### 5. Setting/Curing

Sets in 24 hours @ 20°C

Cures slowly, allow 2 weeks prior to immersion for swimming pools.

If pool is exposed to rain such that grout is underwater any such underwater time must be added to cure time.

#### 6. Storage

Store in original, sealed container in a cool dry place. Under these conditions minimum shelf life is 18 months.

#### 7. Standard Pack Sizes

11E Liquid	3kg can, 15kg pail
11E Hardener	1kg can, 5kg pail
P11 Powder	20kg bag

#### 8. 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.

**Note:** Metz has a fully detailed specification covering use of this material as part of a full system for permanent immersion conditions such as swimming pools. Please refer to Metz for a copy for any such project.

**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:
  - Metz shall not be liable for any loss or damage including consequential loss or damage or loss of profits arising thereby;
  - 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.