

# METZ 33EN-PLASTER

## EPOXY NOVOLAC PLASTER



### DESCRIPTION:

Metz 33EN-PLASTER Epoxy Novolac Plaster is designed to repair concrete substrates prior to application of chemical resistant coatings or toppings. It is used to fill small holes, air pockets and other irregularities and provide a smooth surface.

Metz 33EN-PLASTER Epoxy Novolac Plaster can also be used as a trowellable coating for vertical and overhead surfaces at thickness up to 4mm.

Metz 33EN-PLASTER Epoxy Novolac Plaster is a 100% solids formulation, that provides outstanding chemical resistance. It also cures rapidly even at low ambient temperatures, thus minimising downtime.

### FEATURES AND BENEFITS:

- **Outstanding Chemical Resistance**  
Resistant to a wide range of concentrated acids and alkalis, solvents oils and fats. Resistant to spillages of concentrated sulphuric, hydrochloric and phosphoric acids. Refer Metz Chemical Resistance Chart.
- **High Temperature Resistance**  
Resistant to temperatures up to 150°C
- **High bond, tensile and compressive strengths**
- **Solventless**  
100% solids formulation.
- **Rapid Cure**  
Fast setting, minimises downtime.
- **Low Temperature Cure**  
Cures at temperatures down to 0°C
- **Ease of Application**  
Smooth paste consistency. Lightweight. Can be applied to horizontal, vertical and overhead surfaces.
- **Quality Accreditation**  
The management system governing the development and manufacture of this product is proudly ISO9001:2008 certified.

### RECOMMENDED:

As a substrate repair material for use under Metz 4HB-EN, 33EN-TG, 33EN-VG etc or as a coating in:

- Secondary containment linings
- Acid plants
- Fertiliser plants
- Oil refineries
- Water treatment and sewerage plant infrastructure
- Steel Mills
- C.I.P. rooms in food and beverage plants
- Food processing plants
- Meat and Poultry plants
- Molten sulphur pit vapour zone (use min 3mm)

### NOT RECOMMENDED:

- For floor areas exposed to heavy traffic. Refer Metz 33EN-TG.
- For thickness above about 6mm.
- For exposure to some organic acids and solvents. Refer Metz Chemical Resistance Chart and Metz 93PU series.

### PHYSICAL PROPERTIES:

	(Typical Values)
Density:	0.85 - 0.90 g/cm <sup>3</sup>
Compressive Strength:	25 MPa
Adhesion to concrete (ASTM D7234):	>1.5MPa concrete failure
Coefficient of Thermal Expansion, per °C:	13 x 10 <sup>-6</sup>
Maximum Service Temperature:	150°C
Shrinkage:	0.07%

### COVERAGE:

 Theoretical quantities (allow for wastage)

0.9kgs per sq. metre per mm. of thickness.

### APPLICATION TEMPERATURE:

For optimum results, maintain a temperature of 5°C to 40°C on air and substrate and components during mixing, application and curing.



*Your Acid Proofing & Industrial Flooring Specialist*

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### INSTRUCTIONS FOR USE

#### 1. Temperature of Working Area:

For optimum results, maintain a temperature of 5°C to 40°C on air, substrate and components during application and curing. At temperatures below 5°C, the application becomes more difficult and curing is retarded.

At temperatures above 40°C, the working time decreases.

Application in direct sunlight and rising surface temperatures may result in blistering of the coating due to expansion of entrapped air or moisture in the substrate.

#### 2. Surface Preparation:

All surfaces must be clean and free from oil, grease, water and other contaminants which may inhibit bond. Remove all standing water. For best results, surfaces should be dry.

Abrasive blast or high-pressure water blast to remove laitance and provide a uniform, textured surface.

##### *New Concrete*

New concrete should have attained a compressive strength of 20 MPa minimum. Surface must be free from laitance, form oils and curing compounds. The surface should have a fine wood floated or lightly broomed finish and be 28 days old. Surface moisture content should be less than 10%. Consult METZ for details of testing equipment.

##### *Old Concrete*

Concrete must be sound. Remove laitance, old paints, protective coatings and attacked or deteriorated concrete. Chemically clean surface to remove any contaminants. All prepared surfaces must be allowed to dry prior to coating application. All surfaces must be vacuumed to remove any loose deposits and contamination.

#### 3. Mixing:

##### (i) *Mixing Equipment*

Mechanical mixing is recommended. A special resinous cements mixer or Festo mixer is suitable.

Smaller quantities can be mixed using a heavy duty drill with a suitable paddle. Consult METZ for details.

##### (ii) *Mixing Proportions*

	By Weight	By Volume
33EN-Plaster Liquid	2	4.5 litres
33EN Hardener	1	2.5 litres
Powder P8	2.25	6 kg (1 bag)

**Notes: The liquid to hardener ratio must not be altered under any circumstances. Powder proportion can be adjusted by up to 10% to suit conditions.**

##### (iii) *Mixing Procedure*

Remix liquids prior to use. Mix liquid and hardener together first thoroughly for 1 minute. Add powder gradually with constant stirring. Mix for approx 2 minutes. At the end of the mixing period, all material should be wetted out and uniform in colour and consistency. Material which has begun to

set must be discarded. Do not add any solvent, additive or adulterant to any component, or to the mixed material.

##### iv) *Pot Life*

at 20°C	30 minutes
at 30°C	20 minutes
at 40°C	10 minutes

Note: Increase in temperature will decrease pot life, as will leaving mixed material in a large mass. Spread out material in a thin layer as soon as possible after mixing.

##### v) *Clean Up*

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

Note: Ensure you have the latest mixing instructions, refer [www.metz.net.au](http://www.metz.net.au) for most current data sheet version.

#### 4. Installation:

Materials should be placed immediately after mixing. Do not let mixed material remain in mixing vessel. Apply by squeegee, trowel, rubber float etc. to prepared substrate. Remove excess material with edge of squeegee or float. Surface can be finished with a short nap roller. Finishing must be completed within 30 minutes of mixing at 20°C.

For overhead applications greater than 2mm application may be required in two layers. Consult Metz for details.

#### 5. Setting/Curing:

	Setting time	Full Cure
at 20°C	6 hours	3 days
at 30°C	3 hours	2 days
at 40°C	2 hours	2 days

Do not allow water, chemicals or traffic on the material surface for a minimum of 6 hours. For harsh chemical or physical environments, cure a minimum of 72 hours at 20°C prior to exposure.

#### 6. Storage

Shelf life is at least 12 months if kept in sealed containers and powder kept dry.

#### 7. Safety Precautions

##### *Liquid and Hardener*

Use chemical goggles, PVC gloves and barrier cream. Avoid contact with skin and eyes.

##### *Powder*

Avoid breathing dust. Ensure adequate ventilation.

For full safety precautions refer to Safety Data Sheets.

**Always ensure you have the latest data sheet version, refer [www.metz.net.au](http://www.metz.net.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.
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REV 10/16

### METZ SPECIALTY MATERIALS PTY LTD

A.C.N. 140 636 639

15A Stanton Road, Seven Hills, NSW 2147  
Facsimile: (02) 9671 4292 Phone: (02) 9671 1311

6 University Place, Clayton North, VIC 3168  
Facsimile: (03) 9561 6944 Phone: (03) 9561 6144

Unit 16, 42 Smith Street, Capalaba QLD 4157  
Facsimile: (07) 3823 5552 Phone: (07) 3823 5555

### Distributor