

METZ 96

CHEMICAL RESISTANT MEMBRANE



DESCRIPTION:

Metz 96 is a urethane-asphalt compound used as a membrane under ceramic linings, a membrane and adhesive for foam glass block lining systems and also as a stand alone coating or movement joint sealant. Metz 96 has excellent elasticity, chemical resistance and heat resistance.

FEATURES AND BENEFITS:

- Chemical Resistant
Resistant to many acids and alkalis.
- Flexible
Can bridge hairline cracks in substrate when used as a membrane. Retains elasticity at low temperatures.
- Good Temperature Resistance
Resistant to temperatures from -30 to 100°C.
- Excellent adhesion to concrete and steel.
- High abrasion resistance
- Waterproof
- Quality Accreditation
The management system governing the development and manufacture of this product is proudly ISO9001:2015 certified.

RECOMMENDED:

As a corrosion resistant membrane used behind acid proof ceramics, or as a trowellable lining for tanks, pits, bunds etc. in

- Chemical Industry
- Waste water treatment plants
- Can be used as a membrane and adhesive for foam glass block lining systems in chimneys and sulphur pits.
- Can be used as a movement joint in ceramic tile, brick and monolithic toppings.
- Can be overcoated with Metz 5EN or 4HB-EN for additional protection.
- Petrochemical Industry
- Flue gas environments

NOT RECOMMENDED:

- For heavy traffic without ceramic overlay. Consult Metz for alternative products.
- For exposure to oils or solvents.
- As a movement joint requiring movement greater than $\pm 15\%$

PHYSICAL PROPERTIES: (Typical Values)

Density:	1.1 – 1.2 g/cm ³
Elongation: ASTM D412	150% minimum:
Tensile Strength: ASTM D412	1.5 N/mm ² minimum
Modulus of Elasticity@100% Elongation:	0.42 N/mm ² minimum
Maximum Service Temperature:	100°C
Moisture Vapour Transmission: ASTM D1653:	0.0048 g/m ² .24h.mm Hg
Bond Strength to Steel: ASTM D4541	1 N/mm ² minimum

COVERAGE: Theoretical quantities (allow for wastage)

Metz Epoxy Primer (for concrete):	0.2-0.3 kg/sq. m depending on absorbency of surface
Metz Metal Primer (for metals):	5.5sq.m/l for 180 micron wet film (125 micron dry film)
Metz 96: As membrane under ceramic,	minimum 1.5mm – 1.73 kg/sq.m
For coating,	minimum 2mm. – 2.3 kg/sq.m
For fixing borosilicate glass block 50 x 150 x 225mm:	6.5 kg/sq. m.
For 10mm x 10mm movement joints:	0.12kg/lin.m



INSTRUCTIONS FOR USE

1. Temperature of Working Area

Maintain a temperature of between 5 and 40°C on substrate and air during mixing, application and cure. At temperatures below 5°C, Metz 96 may not cure fully. At temperatures above 40°C, working time will be greatly reduced. Substrate temperature should be at least 3°C above dew point. Avoid applying in high humidity conditions. Material temperature should be kept between 15 and 30°C. Application in direct sunlight and rising surface temperatures may result in blistering.

2. Surface Preparation

All surfaces must be clean and dry. Remove all oil, grease and other contaminants that may inhibit bond.

- a) New Concrete - Surface must be free from laitance, form oils and curing compounds. Surface should have fine wood float finish and be at least 14 days old. Any laitance should be removed by grinding or light abrasive blasting.
- b) Old Concrete - Concrete must be sound. Remove laitance, old coatings and attacked or deteriorated concrete. Chemically clean surface to remove any contaminants. Abrasive blast or high-pressure water blast to remove laitance and provide a uniform, finely textured surface. Any holes should be filled with Metz Epoxy Plaster or similar.
- c) Metals - Abrasive blast to AS1627:4 Class 3 for immersion conditions and Class 2 ½ for all other conditions. If not immediately coating with Metz 96, apply Metz Metal Primer. Consult Metz Metal Primer Data Sheet for full details.

3. Mixing

- a) Equipment
Mechanical mixing is required. A heavy duty variable speed drill with appropriate mixing paddle is recommended. Paddle must be able to mix along bottom and sides of the mixing container.
- b) Mixing Proportions

Metz Epoxy Primer (MEP)	By weight	By volume
Liquid L1 Neutral	1.85	1.6
MEP Hardener	1	1

Metz 96
Supplied in pre-weight kit of 17.55kg, consisting of 17kg liquid and 0.55kg hardener. Note that hardener component is in a compartment under the pails lid.

c) Mixing Procedure

Metz Epoxy Primer - Mix liquid and hardener together thoroughly for 1-2 minutes.

Metz 96 - Shake can of hardener well. Add to liquid and mix thoroughly for at least 5 minutes. Ensure thorough mixing. At regular intervals scrape sides of mixing container. If time permits, transfer mixed materials to new mixing container and remix for 1-2 minutes.

Do not add any solvent or additive to either component or to the mixed material.

Note: Liquid to hardener ratio cannot be altered.

d) Pot Life

Metz Epoxy Primer: 70 minutes

Metz 96: 60 minutes

- e) Mixing equipment, trowels, brushes, rollers etc. should be cleaned with Metz Cleaner, acetone or MEK prior to initial set.

Note: To ensure you have the latest mixing instructions, refer www.metz.net.au for most current data sheet version.

4. Installation

Metz Epoxy Primer (for concrete):

Apply to surface using squeegee then back-roll with short nap roller. Metz 96 can be applied after primer becomes tacky. Primer can be left for up to 24 hours before applying Metz 96.

Apply mixed material to prepared substrate by trowel or squeegee to achieve required thickness. If more than one coat of other Metz coating products is going to be applied on top of existing Metz 96 abrade the underlying Metz 96 to ensure good adhesion after it has cured.

5. Setting/Curing Time

Setting time: 3 hours at 25°C.

Full Cure: 24 hours at 25°C

6. Storage

Store in sealed containers in a dry environment at temperatures between 5 and 30°C. Under these conditions, minimum shelf life is 24 months.

7. Safety Precautions

Liquid and Hardener:

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

For full safety precautions refer to the Safety Data Sheets for

Always ensure you have the latest data sheet version, refer 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.
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.