DESCRIPTION:
Metz 12P is a three part phenolic modified furane resin based bedding and jointing compound which is resistant to a wide range of chemicals.

FEATURES AND BENEFITS:
- **Superior Chemical Resistance**
  Resistant to a wide range of chemicals including acids, alkalis, salts, fats and oils. Refer Metz Chemical Resistance Chart.
- **Excellent Solvent Resistance**
  Ideal for use when exposed to strong solvents.
- **High Performance at Elevated Temperatures**
  May be used at temperatures of up to 200ºC.
- **Impermeable**
  Prevents ingress of aggressive liquids.
- **Controlled Setting**
  Hardener ratio may be adjusted to suit temperatures at time of installation.
- **Quality Accreditation**
  The management system governing the development and manufacture of this product is proudly ISO9001:2015 certified.

RECOMMENDED:
Recommended for bedding and grouting acid bricks and tiles.
- Flooring
- Reaction Vessels
- Towers
- Bunds
- Acid Tanks
- Pits
- Drains

NOT RECOMMENDED:
- For use with hydrofluoric acid. Refer Metz 12PHF.
- For use in direct contact with concrete or metal. Consult Metz for recommended membrane.
- For areas subject to immersion in strong oxidizing acids (e.g. nitric, chromic, concentrated sulphuric acid. Refer Metz 7KE, Metz Sauereisen 65, Metz 14VE or Metz 5NF).
- For areas subject to strong chemicals after limited curing times.
- For installations where dry surfaces cannot be achieved.

PHYSICAL PROPERTIES: (Typical Values)
- Temperature Limit: 200ºC
- Compressive Strength: 70MPa
- Modulus of Elasticity: 15,000 MPa
- Coefficient of Thermal Expansion: 22 x 10^-6ºC
- Density: 1.95-2.05 g/cm³
- Colour: Black

COVERAGE: Theoretical quantities (allow for wastage)
- For fully bedding and jointing (nominal 3mm joint) standard 75mm thick acid brick: 0.3kg/brick
- For bonding bricks in independent brick wall (105mm thick): 0.2kg/brick
- For fully bedding and jointing tiles 240 x 115 x 30mm (6mm joint): 15kg/sq.m.
- For jointing tiles only 240 x 115 (6mm x 20mm joint): 3.0kg/sq.m.

APPLICATION TEMPERATURE:
The recommended temperature range for application is 10ºC to 30ºC.
At temperatures below 10ºC, curing may be inhibited and final technical properties may be affected.
At temperatures above 30ºC consistency and setting rates may be affected.
If necessary consult Metz.
1. Temperature of Working Area
Maintain a temperature of between 10°C and 30°C on the Metz components, brick or tile and substrate during mixing and application. Air temperature in the area where Metz 12P is to be applied should also be between 10°C and 30°C. At temperatures below 10°C, the material will not cure properly. Consult Metz if temperature cannot be maintained above 10°C.

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 mixing equipment with ice water, and by cooling the Metz components.

2. Surface Preparation
All surfaces must be clean and completely dry. Metz 12P will not adhere to concrete or metal surfaces. These surfaces must first be coated with a membrane. Consult Metz for recommendations.

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 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

<table>
<thead>
<tr>
<th></th>
<th>By Weight</th>
<th>By Volume</th>
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</thead>
<tbody>
<tr>
<td>12P Liquid</td>
<td>2.5</td>
<td>1.4</td>
</tr>
<tr>
<td>12P Hardener</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>12P Powder</td>
<td>7.5</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Note:

i) The powder proportion may be adjusted to suit conditions (±10%).
ii) The hardener proportion may be reduced by up to 10% in hot weather to increase the pot life.

Note: Further reduction of hardener content below the minimum may result in inadequate curing and reduced physical properties.

c) Mixing Procedure
Mix Liquid component with a slow speed drill for a minimum of 30 seconds and at least until all material is of consistent appearance. Thoroughly mix liquid and hardener together first. Add powder to suit. Do not leave mixed material in thick mass as this will greatly accelerate its setting. Spread freshly mixed material thinly in shallow tray.

d) Pot Life
30 minutes at 20°C.

e) Clean Up
Use Metz Cleaner.

4. Installation

a) Masking of Floor Tiles
Tiles, where appearance is important, should first be coated with Metz Masking Compound. This compound is applied sparingly with a lamb's wool roller. At least two coats are recommended, with great care being taken to ensure that it does not run down the tile sides of the joint. The Masking Compound should be allowed to dry (approx. 1 hour under normal conditions) before the second coat is applied. For porous tiles, three coats or more may have to be applied. If tile surfaces are very rough, it is recommended that they be waxed before laying.

b) Application
Apply using trowel or gun. For bedding and jointing brickwork, ensure that brick surfaces to be bonded are fully covered with Metz 12P and are well beaten down with joints of minimum width (3 to 4.5mm). When jointing floors, ensure joints are flush with tile surface. Remove excess cement before it begins setting. After joints have set (usually the next day) the masking compound can be removed with water and a scrubbing machine.

c) Setting Time at 20°C
overnight

d) Physical Curing Time at 20°C
3 to 4 days (complete chemical cure 4-6 weeks).

5. Storage
Store in a cool, dry environment for a minimum shelf life of 12 months.


<table>
<thead>
<tr>
<th></th>
<th>12P Liquid</th>
<th>12P Hardener</th>
<th>12P Powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>12P Powder</td>
<td>20kg pail, 225kg drum</td>
<td>15kg pail</td>
<td>20kg bag</td>
</tr>
</tbody>
</table>

7. Safety Precautions

a) Liquid and Hardener:
Avoid all contact with skin and eyes. Use chemical goggles, PVC gloves and barrier cream.

b) Powder:
Use dust respirator and chemical goggles.

c) Cleaner:
Inflammable. Ensure adequate ventilation.

For full safety precautions, refer to the Material Safety Data Sheet.

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