

# Megapoxy HELLAS<sup>®</sup>

## Technical Bulletin

### MEGAPOXY PM

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## Gap filling epoxy paste adhesive for civil engineering use

### Summary

MEGAPOXY PM is specially formulated non-sag epoxy filling paste and adhesive. This easy-to-use two-part epoxy product sets after mixing with excellent properties ideally suited for the following applications.

### Bonding

- Precast concrete articles
- Grouting bolts
- Natural stones
- Bricks and ceramics
- Metals

### Filling and repair

- Concrete pipes and tanks
- Fibreglass articles
- Concrete floors and stairs
- Concrete columns
- In situ formed concrete

### Product specification

	Part A	Part B
<b>Consistency</b>	Thixotropic paste	Thixotropic paste
<b>Colour</b>	White	Black or Neutral
<b>Flash point</b>	>100°C	>100°C

### Surface preparation

#### METALS

Metals should be grit blasted to AS CK 9.4 Class 3 finish. If this is not possible, mechanically abrade to clean bright metal surface and degrease by flooding the abraded surface with Megapoxy Degreaser. Wire brushing is not entirely satisfactory and gives minimal adhesion only.

#### CONCRETE

Concrete should be free from grease and oil. If necessary, clean with industrial heavy duty degreaser. When clean, remove surface laitence. This is best done by mechanical abrasion such as scabbling, grit blasting or grinding. If this is not possible acid etching must be carried out. Mix concentrated hydrochloric acid with equal volume of water and spread at the rate of 0.5 litre per square metre of concrete surface. Allow to react for about 10 minutes and wash the area thoroughly and scrub with a stiff bristled broom to remove loose sand. Allow to dry for 24 hours. For maximum adhesion concrete should be surface dry.

#### PAINTED SURFACES

Steps should be taken to remove all paint.

##### Metals

Good quality paint stripper should be used, followed by grit blasting.

<b>Surface preparation</b> (continued)	<b>Concrete</b> The surface may be either flame-cleaned, or mechanically treated with a scutching tool. Complete the preparation by grinding or scabbling.
<b>Processing data</b>	<b>Mixing ratio:</b> 1 part resin to 1 part hardener <b>Mixing:</b> Mix until uniform grey or white <b>Working life:</b> 45 minutes at 25°C <b>Minimum application temperature:</b> 15°C <b>Minimum cure time:</b> 12 hours at 25°C <b>Full cure time:</b> 4 days at 25°C
<b>Advantages</b>	<ul style="list-style-type: none"><li>• Simple 1 : 1 mix ratio</li><li>• Creamy texture, blends easily</li><li>• Non sag on vertical surfaces</li><li>• Rapid setting</li><li>• Adheres and cures under adverse conditions (cold and damp)</li><li>• Good strength retention after prolonged immersion in water</li><li>• Tensile and compressive strength superior to concrete</li><li>• Very good chemical resistance</li></ul>
<b>Availability</b>	MEGAPOXY PF is available in 1, 4 & 20 litre kits. Shelf life of un-opened kits is 2 years minimum. The product should be stored in a cool, dry place
<b>Precautions</b>	Avoid prolonged contact with skin. Wash affected areas with soap and warm water. For further information refer to Bulletin No.100 and Safety Data Sheet for MEGAPOXY PM
<b>Typical cured properties</b>	<b>Maximum operating temperature:</b> 70°C <b>Density:</b> 1.45 kg/lt <b>Tensile strength:</b> 25 MPa <b>Tensile bond strength:</b> 10 MPa <b>Compressive strength:</b> 80 MPa <b>Flexural strength:</b> 15 MPa <b>Coefficient of linear expansion (mm/mm/°C x 10<sup>-6</sup>):</b> 60
<b>Cleaning up</b>	Uncured MEGAPOXY PM can be removed with MEGAPOXY Thinners.
<b>Important information</b>	It is essential that the correct mixing ratio be used and that the Part "A" and Part "B" are thoroughly mixed together before use. Inaccuracies and poor mixing will result in lower physical properties of the cured system and, if the error is sufficiently large, the system may not cure satisfactorily and discolour on ageing. <b>Properly mixed MEGAPOXY PM will not stain or discolour white or light coloured marble and ceramics.</b>
<b>Technical service</b>	All purchasers of MEGAPOXY products are invited to avail themselves of our technical service on epoxy base materials. The methods and systems outlined in this bulletin are the best available at the present time, however continual research and development is being carried out and could result in change without prior notice.

Please do not hesitate to contact us, for any additional information.