# Megapoxy





### **Technical Data Sheet**

DESCRIPTION	Megapoxy PF is a rapid set epoxy adhesive which sets in seven minutes and attains more than half its ultimate strength within 15 minutes of mixing.  Megapoxy PF "hardens-as-you-hold-it" for immediate on the spot emergency repairs to tanks, pipes, machinery, concrete structures etc.  Properly mixed Megapoxy PF will not stain or discolour white or light coloured marble and ceramics	
RECOMMENDED APPLICATIONS	Bonding	Filling and Repair
	Precast concrete articles	Concrete pipes and tanks Fibreglass articles
	Metal to metal or concrete	Fibreglass articles
	Grouting bolts	Concrete floors and stairs
	Natural stones	Concrete column
	Bricks and ceramics	<ul> <li>Insitu formed concrete</li> </ul>
	Bonding compressed cement sheet	<ul> <li>Flush-filling countersunk screws in fibre cement sheet</li> </ul>
PROPERTIES	Mixing Ratio by Volume	1 Part A to 1 Part B
	Work Time at 25°C:	3 minutes
	Minimum Cure Time at 15°C	2 hours
	Minimum Cure Time at 25°C	1 hours
	Minimum Cure Time at 35°	30 minutes
	Minimum Application Temperature	10°C
	Maximum Operating Temperature	80°C
	Colour Part A	White
	Colour Part B	White or Dark Grey
	Appearance Mixed	White or Grey
CURED PROPERTIES	Compressive Strength - ASTM D695-23	70Mpa
	Bond Strength Concrete - ASTM D4541	>3Mpa
	Tensile Bond Strength Steel - ASTM D897-08	10Mpa
	Modulus of Elasticity - ASTM D695	2Gpa
	Flexural Strength ASTM D790-17	46Mpa
	Tensile Strength - ASTM D638-22	21Mpa
	Tensile Shear Strength - ASTM D1002-10	8Mpa
	Hardness - Shore D - ASTM D2240-00	80
	Coefficiant of Linear Thermal Expansion, Mean	57.9 x 10-6 (mm/mm/°C)
	Dielectric Strength 50Hz @25°C(Kv/cm)	190

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#### **CHARACTERISTICS**

- VOC Free
- · Smooth and easily workable
- Simple 1:1 mix ratio
- · Creamy texture, blends easily
- Non sag on vertical surfaces or overhead surface
- Sets in 3 minutes at 25°C 90% cure within 1 hour at 25°C
- · Very high strength permanent bonds
- Excellent tensile and compressive strengths, superior to concrete
- · Excellent chemical resistance
- · Can be machined after 30 minutes cure at 25°C

### SURFACE PREPARATION

#### Concrete

Concrete should be free from grease and oil. If necessary, clean with industrial heavy duty degreaser. When clean, remove surface laitance. 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 meter 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 the concrete should be surface dry.

#### **Metal Surfaces**

Metals should be grit blasted to AS CK 9.4 - 1964 Class 3 finish. If this is not possible, mechanically abrade the surface to a clean, bright metal surface. Once this abrasion is complete, degrease the surface by flooding with an industrial grade degreaser. Wire brushing is not entirely satisfactory and gives minimal adhesion only.

#### **Coated Surfaces**

It is recommend to remove all coatings prior to bonding, bonding to coated surfaces will give inferior bond strengths compared to bonding directly to a prepared substrate.

#### Concrete:

The surface may be either flame-cleaned, or mechanically treated with a scutching tool, to remove all traces of paint. Complete the preparation by diamond grinding or scabbling.

#### Metals:

Steps should be taken to remove all paint and/or galvanizing. Good quality paint stripper should be used, followed by grit blasting or grinding to a bright metal finish.

## IMPORTANT INFORMATION

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.

#### **CLEANING**

To keep mixing implements and working tools clean, use Megapoxy Thinners. Use disposable rubber gloves to protect hands and maintain proper industrial hygiene. For further details refer to the Megapoxy PF Safety Data Sheet.

#### **PACKAGING**

Megapoxy PF is available in 4lt  $\&\,20$  litre kits and in Grey or White. Product should be stored in cool dry store.

### TECHNICAL SERVICE

All purchasers of Megapoxy Products, are encouraged to avail themselves of our Technical Service for our Megapoxy Products. The information in this Bulletin is correct at time of publication, however continual research and development is being carried out and specs may change without notice.

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