

# MIXSET EP

Low viscosity epoxy resin injection grout system

**Mixset EP** is a high strength, solvent free, low viscous epoxy resin anchoring grout. It consists of two components; mixed in the proportions supplied to form a strong permanent bond and seal in cracks in concrete and masonry. The system is designed to inject into cracks with a suitable resin injection grouting machine. The resin shall form a permanent bond and seal in both dry and damp conditions.

## Appropriation

Grouting Concrete / masonry cracks to form a permanent seal

## Characteristics

Early and quickly gains high strength  
Resistance against dynamic vibration  
Moisture tolerant - can be applied to slightly damp conditions  
Corrosion resistant  
Low viscosity helps to penetrate into the micro cracks  
Suitable for structural repairs  
Resistant to wide range of chemicals  
Non-shrink, adhere with no reduction in bonding strength  
Designed for hot climates

## Technical Data & Properties

Compressive strength (BS 6319): 70N/mm<sup>2</sup> @ 20°C  
94.6 N/mm<sup>2</sup> @ 35°C  
Tensile Strength (BS 6319): 26N/mm<sup>2</sup> @ 20°C  
Flexural strength (BS 6319): 63N/mm<sup>2</sup> @ 20°C  
Young modules in compression: 16GPa  
Pot life: 90 minutes @ 20°C  
40 minutes @ 35°C  
Specific gravity: 1.04  
Mixed viscosity: 1.01poise@ 35°C

## Product Management

**Surface preparation:** The surface to apply Mixset EP should structurally sound and clean. Remove traces of oil, mould release agent, curing compound, grease, paint, laitance or any other contaminants. The area shall be dry and free of standing water.

The surface should be preferably be prepared using high pressure water jetting or light abrasive blasting, followed by thorough washing to remove dust and remaining particles. Dirt alone may be removed with wire brush or mechanical way.

Blow the cracks and treated surface with oil free air to ensure complete removal of all dust and loose particles. Ensure that the surface is thorough dry.

In the presence of running water the flow must be stopped using Mixset PU500 which helps to get rapid setting water seal foam. When the water is stopped the cracks are re-injected with Mixset PU

**Placing of packers:** The injection packers shall be inserted into pre-drilled holes at an interval along the length of cracks. The distance between each point depends up on the width and depth of the crack. Placing shall be close enough to ensure that the resin will penetrate along the crack to the next point of injection.

# MIXSET EP

Low viscosity epoxy resin injection grout system

The surface of the cracks between the packers and shall be sealed with Mixbuild EP, 30 to 40 mm wide and 2 to 3mm thick. Both sides of any cracks which go all the way through a wall or slab shall be sealed in this way. In the case of a wall or slab cracked all the way through, packers shall be located on both sides of those at the back placed at midway points those at the front.

The Mixbuild EP shall be allowed to cure for 8 hours at 35<sup>o</sup>C. At low ambient temperature the curing time will be extended and the applicator shall ensure that the surface sealant has adequately cured prior to continuing. One end of the injection hose shall be attached to the lowest packer on vertical cracks or to either end of the horizontal cracks. Alternative methods also can be used where injection nipples are bonded to the substrate.

After completion of injection works the system shall be allowed to cure for 24 hours and shall be left undisturbed for this time.

**Mixing:** Mix thoroughly the entire hardener and resin contents until the liquid become clear. Only mix sufficient quantity resin that can be used within the pot life of the material.

**Equipment:** The system should be used with standard injection resin equipment having closed containers. The injection pressure should be minimum 4 bar (0.4n/mm<sup>2</sup>)

**Removal of packers:** Remove the packers and make good any holes or voids with Mixbuild EP and allow to cure. Mixset EP can be ground or softened with a blow lamp and peeled off. Do not allow to burn

**Cleaning:** Clean the tools and mixers with solvent immediately after the use. Hardened materials can only removed mechanical way.

Points to be noted:

- Mixset EP should not be used in live cracks where further movement is expected.
- Mixset EP should not use in the presence of running water, in this case Mixset PU500 / Mixset PU is advisable. Contact FAB technical service Dept for further information

## Packing & Storage

Mixset EP is available in 1 litre and 4 ltr kit. For site installations or mass consumptions, deliveries shall be made in bulk custom-designed containers. Mixset EP should be stored in cool, dry and shaded warehouses. Shelf life is 12 months when stored under cover, out of direct sunlight, protected from extreme temperatures and as per recommendations. In extreme tropical climate, the product must be stored in cooled ambience. Excessive humidity and over exposure to UV will result in the reduction of shelf life.

## Health & Safety

Mixset EP contains no hazardous substances. As with all construction chemical products, caution should always be exercised. Protective clothing such as gloves and goggles shall be worn whilst handling. Wearing long sleeve overall, safety shoes and face mask is recommended for maximum safety. Reseal all containers after use and ensure product is stored as instructed on the safety section of the labeling. Treat any contact to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately. For more details, please refer to the MSDS released on each FAB product

Rev. Nov-10/01

Technical information given in this datasheet is true and exact to the best of our knowledge, laboratory upshot and hands-on application. The datasheets of all products are revised/updated regularly and hence ensure that the latest release is used for reference and recommendation. The date of the publishing is as in this sheet. All data are mean of numerous tests, assessment and analysis conducted under laboratory ambience. Climatic disparity in temperature, humidity, etc. and porosity of substrate may impinge on the values.

### Group Head office:

PYCHEM Co. L L C  
Post Box 23940, Sharjah.  
Te: +971 6 5420414 / 5431636  
Fax: +971 6 5421446  
Mail: [mail@fab-cc.com](mailto:mail@fab-cc.com)  
[fabchem@gmail.com](mailto:fabchem@gmail.com)

Under Technical Collaboration with  
**MIX UK Limited**  
Cherry Tree House, Cherry Tree Lane  
Rostherne, Cheshire,WA143RZ  
Web: [www.mixuk.com](http://www.mixuk.com)

### Head office:

T33A/1, Thryambhava Houses  
Kalapetty road,Coimbatore – 14  
Tel: 0422 3222245  
Fax: 0422 2625207  
Mail: [mail@fab-cc.com](mailto:mail@fab-cc.com)  
[fabchem@gmail.com](mailto:fabchem@gmail.com)

THE CONSTRUCTION CHEMIST



FABCHEM



PYCHEM



MIX UK LTD