DRIZORO® Construction Products

MAXEPOX® FIX

HIGH-STRENGTH, SOLVENT-FREE, FLUID EPOXY MORTAR FOR ANCHORAGES, FIXING AND FILLINGS BY POURING

DESCRIPTION

MAXEPOX® FIX is a three-component fluid mortar formulated with solvent-free epoxy resins and well-graded mineral products, that provides high mechanical properties and fluidity. It is specially designed for anchoring bolts and filling voids by pouring.

APPLICATION FIELDS

- Anchoring of bolts in horizontal surfaces.
- Filling of column bases and machinery foundations.
- Anchoring of bolts, cables, and metal elements in concrete and stone.
- Repairing of cracks and joints in pavements.
- Fixing of rebars for connection in horizontal surfaces.
- Structural concrete repair by pouring.

ADVANTAGES

- Very good adhesion on concrete substrates and metal surfaces.
- High mechanical strength and non-shrinkage, providing an excellent tensile strength. Withstands repeated loads and vibrations.
- Excellent fluidity and easy placement. High cohesion of the fresh mortar without segregation or bleeding.
- Good chemical resistance against oils, greases, fuels, diluted acid and base solutions.
- Waterproof product.
- Non-toxic, solvent-free, and non-flammable. Suitable to use in poor ventilated areas.

APPLICATION INSTRUCTIONS

Surface preparation
Surface must be structurally sound and clean, free of dust, coatings, efflorescences, oil, demoulding agents, gypsum or any foreign material that could affect to adherence. Substrate should be levelled and with light roughness. Moisture content of the surface must be below 4 %. All steel and metal surface must be thoroughly cleaned by shot or sandblasting to remove any corrosion and must be degreased.

Consult our technical note *Preparation of concrete surfaces for application of epoxy-based coatings*.

Mixing
MAXEPOX® FIX is supplied as a pre-weighed three-component set. The hardener, component B, is poured into the resin, component A. In order to ensure the proper reaction between both components, make sure that all of component B is added.

Mix mechanically using a slow speed drill until achieving a homogeneous product in colour and appearance. Small quantities of product can also be mixed by hand. Do not mix for prolonged period nor use high speed mixer which may heat the mixture or introduce air bubbles. Then add component C and continue the mixing until a complete homogeneity. The open time is from 30 to 40 minutes at 20 ºC, increasing with lower temperatures or small quantities of mixture and reducing with higher temperatures.

Application
MAXEPOX® FIX is placed directly by pouring from the mixing container in a continuously way, in one direction from one side to the other, in order to minimize the chance of air entrapment. If it is necessary, a manual

vibration element can be used in order to help to fill the volume but an excessive vibration must be avoided because it may cause bleeding and air entrapment. Air vents should be provided to facilitate the exit of air from the space to be filled.

Apply in layers with thickness no greater than 4 cm. The next layer should not be pour until the previous one is set and cold, that is 24 hours approximately depending on ambient conditions.

In case of using de-moulding formworks, these should be protected with plastic sheets and de-moulding agents.

The pot life at 20 ºC is 30 – 40 minutes, increasing the time at lower temperatures or when small quantities the mixture are done. Higher temperatures reduces pot life.

Application conditions
Do not apply if temperature is below 5 ºC or if lower temperature is expected during the next 24 hours. Do not apply on frozen or frosted surfaces. Do not apply if rain is expected within the 4-6 hours after placing.

Curing
Allow a curing time of 7 days at 20 °C for total curing and before putting into service. Applications carried out at lower temperatures, with high humidity or with poor ventilation will require longer drying and curing times.

Cleaning
Tools and equipments can be cleaned with ***MAXEPOX® SOLVENT*** immediately after use. Once the product hardens, it can only be removed by mechanical methods.

CONSUMPTION

A 32,5 kg set of ***MAXEPOX® FIX*** fills a volume of about 17 litres, that is approximately 1,9 kg/m^2 and mm thickness of ***MAXEPOX® FIX***.
This estimative consumption may vary depending on the roughness and surface conditions. A preliminary test on-site will determine the coverage exactly.

IMPORTANT INDICATIONS

- Do not add cements, solvents or any other non-specified compounds to ***MAXEPOX® FIX***.
- Keep the resin/hardener proportions.
- Never use leftovers from previous mixes.
- Do not excess the maximum recommended thickness per application.
- For other uses not specified in this Technical Bulletin consult our Technical Department.

PACKAGING

MAXEPOX® FIX is supplied in three-components pre-weighed sets of 32,5 kg (4 kg component A, 1 kg component B and 27,5 kg component C). It is available in light grey colour.

STORAGE

Twelve months in its original unopened containers in a dry and covered place, with temperatures between 5 °C and 30 °C. Protect against direct sunlight and frost.

SAFETY AND HEALTH

MAXEPOX® FIX is non-toxic but rubber gloves and safety goggles must be used during application. In case of eye contact, rinse immediately with clean water without rubbing and seek medical assistance. In case of skin contact, wash with abundant water and soap. If ingested, seek immediate medical assistance. Do not induce vomiting.

For further information, Safety Data Sheet for ***MAXEPOX® FIX*** is available by request.

Disposal of the product and its empty packaging must be made by the final user and according to official regulations.

TECHNICAL DATA

Colour of mixed mortar	Light grey
Component ratio A:B:C (kg)	4:1:27,5
Binder:aggregate ratio	1:5,5
Application temperature (°C)	> 5
Apparent density fresh mortar (kg/l)	1,9
Pot life (min, at 20 °C)	30 - 40
Setting-time (hours, at 20 ºC)	10 – 12
Final curing time (days, at 20 °C)	7
Compressive strength (kp/cm^2)	> 800
Flexural and strength (kp/cm^2)	350
Elasticity modulus (kp/cm^2)	150.000
Adhesion on concrete (kg/cm^2)	> 30
Coefficient of thermal expansion (linear), (cm/°C)	3,5·10^{-5}
Resistance to water	Excellent
Resistance to chemical attack	Excellent
Consumption (kg/m^2/ mm thickness)*	1,9
Recommended thickness per layer (cm)	< 4

(*)These figures may vary depending on of the roughness and the surface conditions. A preliminary test on-site will determine the coverage exactly.

GUARANTEE

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