

MasterEmaco S 730

Thixotropic fiber reinforced, polymer repair mortar

MATERIAL DESCRIPTION

MasterEmaco S 730 is a ready to use, shrinkage compensated, blend of dry powders. It requires only the addition of potable water to produce a highly consistent repair mortar suitable for structural concrete and masonry repairs.

CONFORMANCE

MasterEmaco S 730 has been formulated to meet the requirements of ASTM C1437-01.

TYPICAL USES

MasterEmaco S 730 is suitable for the following:

- All types of structural repairs that can be applied by trowel, spray or hand.
- Repair of structures subjected to repetitive loading and trafficked areas.
- Repairs to reinforced or pre-stressed columns or beams.
- Industrial repairs, especially in areas containing mineral oils, lubricants etc.
- Repairs in marine environments.

SPECIAL FEATURES

- Versatile – Can be applied in extreme environments
MasterEmaco S 730 is chloride free and does not contain metallic aggregate.
- **MasterEmaco S 730** is suitable for spray or trowel applications & in thicknesses up to 50mm in one layer, when applied by hand.

TYPICAL PROPERTIES *

Typical properties when tested at 2.8 liters water/20kg powder:

Appearance	Grey powder
Fresh wet density	2030kg/m ³
Yield	±70 bags/m ³
Compressive Strength	40MPa @ 28 days
Flexural Strength	5MPa @ 1 day
Plastic Expansion	0.2%
Hardened Expansion	0.05%

APPLICATION PROCEDURE

Preparation of Substrate:

It is essential that the substrate to be repaired is sound, clean and free of all contamination.

The damaged areas of concrete to be removed should be clearly identified. The perimeter of the area should be saw cut to a depth of 10 mm and the edges cut as neatly as possible keeping the sides square. Featheredging is not permitted, and a minimum thickness of 10 mm must be maintained over the whole repair area.

The substrate should be prepared to provide a rough surface having at least a 5 mm amplitude at 20 mm frequency. If unsound or contaminated concrete is found to extend beyond the pre marked area, consult the engineer in charge. Subject to his approval cut out as necessary, back to clean sound concrete and repair as previously stated.

If reinforcement is corroded ensure that the back of the steel has been exposed. Reinforcement should have all rust removed by the use of power tools, abrasive blasting (wet or dry) or wire brushing. Reinforcing steel should be exposed and cleaned around its whole circumference. Steel should be prepared to Swedish Standard SIS 05-900:1967-SA 2½ or BS 4232 Ref. 24 second quality.

Extra protection to the reinforcement can be provided by the use of **MasterEmaco 8100 AP** dependent upon the circumstances of use and requirement of the client.

Severely corroded reinforcement may require replacement and the engineer must be consulted.

Limitations:

Do not attempt repairs using **MasterEmaco S 730** on a 5°C and falling temperature scale. Avoid excessive heat (35-40°C). Cooling of mix water or covering of the structure with shade cloth may be necessary to reduce heat.

MasterEmaco S 730

Thixotropic fiber reinforced, polymer repair mortar

Water Addition:

Water added at the following rates per 25kg bag of **MasterEmaco S 730** will give the consistency indicated:

Trowelable 3.0 -3.4 litres

PACKAGING

25kg polylined bags – yield 12 litres.

STORAGE

Store under cover, out of direct sunlight and protect from extremes of temperatures.

Shelf life:

12 months from date of manufacture. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult Master Builders Solutions' Technical Services Department.

SAFETY PRECAUTIONS

As with all chemical products, care should be taken during use and storage to avoid contact with eyes mouth, skin and foodstuffs (which can also be tainted with vapour until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use.

NOTE

Technical support, where provided, does not constitute supervisory responsibility. For additional information contact your local MB Construction Chemicals Solutions South Africa (Pty) Ltd representative. MB Construction Chemicals Solutions South Africa (Pty) Ltd shall not be liable for technical advice provided.

MB Construction Chemicals Solutions South Africa (Pty) Ltd reserves the right to have the true cause of any difficulty determined by accepted test methods. Undertaking such tests is not, and shall not be deemed to be, an admission of liability or an assumption of any risk, loss, damage or liability.

QUALITY AND RESPONSIBLE CARE

All products originating from MB Construction Chemicals Solutions South Africa (Pty) Ltd are manufactured under a management system independently certified to conform to the requirements of the quality standards ISO 9001, environmental and occupational health and safety standards.

* Properties listed are based on laboratory controlled tests.

DISCLAIMER

The technical information and application advice given in this MB Construction Chemicals Solutions South Africa (Pty) Ltd publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.