

PRODUCT DATA SHEET

SikaEmaco® S 730

(formerly MEmaco S 730)

Thixotropic fiber reinforced, polymer repair mortar

DESCRIPTION

SikaEmaco® 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.

USES

SikaEmaco® 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.

CHARACTERISTICS / ADVANTAGES

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

PRODUCT INFORMATION

Packaging	20kg bag
Shelf Life	12 months
Storage Conditions	Store properly in undamaged original sealed packaging, in dry cool conditions.

TECHNICAL INFORMATION

Compressive Strength	40Mpa at 28 days	
Tensile Strength in Flexure	5 Mpa at 24 hours	
Expansion	Plastic expansion	~0.2%
	Hardened expansion	~0,05%

APPLICATION INFORMATION

Fresh mortar density	~1.95kg/l
Consumption	This depends on the substrate roughness and thickness of layer applied. As a guide, ~ 17 kg of powder per cm thick per m2
Yield	20 kg of powder yields approximately 12 litres of mortar
Ambient Air Temperature	+5 °C minimum; +30 °C maximum
Mixing Ratio	3.0 to 3.4 litres of water for 20 kg powder
Substrate Temperature	+5 °C minimum; +30 °C maximum

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

USES

- Refer to the Method Statement for Concrete Repair using SikaEmaco® system for more information regarding substrate preparation or refer to the recommendations provided in EN 1504-10
- Avoid application in direct sun and/or strong wind.
- Do not add water over recommended dosage
- Apply only to sound, prepared substrate
- Do not add additional water during the surface finishing as this will cause discolouration and cracking
- Protect freshly applied material from freezing

FURTHER DOCUMENTS

- Versatile – Can be applied in extreme environments MasterEmaco S 730 is chloride free and does not contain metallic aggregate.
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ECOLOGY HEALTH AND SAFETY

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Concrete:

The concrete shall be thoroughly clean, free from dust, loose material, surface contamination and materials

which reduce bond or prevent suction or wetting by repair materials. De-laminated, weak, damaged

and deteriorated concrete and where necessary sound concrete shall be removed by suitable means.

Steel Reinforcement:

Rust, scale, mortar, concrete, dust and other loose and deleterious material which reduces bond or contributes

to corrosion shall be removed. Surfaces shall be prepared using abrasive blast cleaning techniques or high pressure water-blasting to Sa 2 (ISO 8501-1) Reference shall be made to EN1504-10 for specific requirements.

MIXING

SikaEmaco® S 730 can be mixed with a low speed (< 500 rpm) hand drill mixer or for machine application, using a force action mixer 2 to 3 bags or more at once depending the type and size of mixer. In small quantity, SikaEmaco® S 730 can also be manually mixed. Pour the recommended water in a suitable mixing container. While stirring slowly, add the powder to the water and mix thoroughly at least for 3 minutes adding additional water if necessary within the mixing time to the maximum specified amount and adjust to the required consistency.

APPLICATION

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 SikaEmaco 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.

CURING TREATMENT

Protect the fresh mortar immediately from premature drying using an appropriate curing method e.g. curing compound, moist geotextile membrane, polythene sheet etc.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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Product Data Sheet

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