

# Emaco S73

## Thixotropic fibre reinforced, polymer repair mortar

### Description

Emaco S73 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

Emaco S73 has been formulated to meet the requirements of the SABS test method 862-2:1994 and ASTM C1437-01.

### Typical uses

Emaco S73 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

- Emaco S73 is chloride free and does not contain metallic aggregate
- Emaco S73 is suitable for spray or trowel applications & in thicknesses up to 50mm in one layer, when applied by hand.

### Typical Properties

Appearance	Grey powder
Fresh wet density	2030kg/m <sup>3</sup>
Yield	±70 bags/m <sup>3</sup>
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. Feather-edging 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 Concreative<sup>®</sup>ZR, dependant upon the circumstances of use and requirement of the client.

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

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## Limitations

Do not attempt repairs using Emaco S73 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.

## Water addition

Water added at the following rates per 25kg bag of Emaco S73 will give the consistency indicated:

Trowelable	3 litres
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## Packaging

25kg polylined bags – yield 12.5 litres.

## Storage

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

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult BASF Construction Chemicals SA's 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

### *For professional use only*

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local BASF Construction Chemicals SA representative. BASF Construction Chemicals SA reserves the right to have the true cause of any difficulty determined by accepted test methods.

## Quality and care

All products originating from BASF Construction Chemicals' SA facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001:2000.

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As all BASF's technical datasheets are updated on a regular basis it is the user's responsibility to obtain the most recent issue.

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