

PRODUCT DATA SHEET

SikaEmaco® N 301

(formerly MEmaco N 301)

Single component polymer modified fairing coat and filler for pinholes in concrete and masonry

DESCRIPTION

SikaEmaco® N 301 is a single component acrylic polymer modified repair mortar for use as a "fairing coat" or cosmetic mortar. When mixed with water, as directed, a fine grey trowellable mortar results which can readily be applied to fill in pores, blowholes and blemishes on a concrete and masonry surface. SikaEmaco® N 301 is specially formulated to produce a shrinkage compensating mortar with no cracking when applied in a thin section up to 3 mm thickness. SikaEmaco® N 301 is suitable for use in hot and tropical climatic conditions.

USES

- As a fairing or skim coat to cover and make good blemishes in concrete surfaces such as blowholes, and defects caused by 'sand runs', shutter movement and grout loss.
- Reprofiling concrete, precast elements and masonry surfaces up to 3 mm thickness.
- Preparatory treatment to concrete to receive a thin film acrylic and bituminous based protective coatings.
- To produce a uniform surface over repaired area.

FEATURES

- Does not require a primer.
- Requires only the addition of mixing water.
- Shrinkage compensating.
- Sound adhesion to concrete and masonry.
- Flexible.
- Smooth, easily produced finish.
- Low permeability resistance to freeze / thaw cycles.
- Filling and sealing of hairline cracks.
- Subsequent paint coats, such as acrylic or bituminous coatings can be applied with greater economy.
- Can be mixed with styrene butadiene rubber emulsion (SBR) admixtures.

PRODUCT INFORMATION

Packaging	20 kg bags
Appearance and colour	Light Grey
Shelf life	12 months from date of production
Storage conditions	Store in original unopened packaging in cool and dry condition between +5 °C and +35 °C. Protect from direct sunlight, heat and moisture
Density	~1.7 kg/l (mixed at 25°C)
Maximum grain size	~150 µm (microns)

TECHNICAL INFORMATION

Compressive strength	at +25°C	28 days	(ASTM C109)
	w/p ratio = 0.30	~25 N/mm ²	

APPLICATION INFORMATION

Consumption	One 20 kg bag will cover ~16 m ² when applied at 1 mm thickness. This figure is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application tools/equipment.
Yield	~15.3 L / 20 kg bag
Layer thickness	3 mm max.
Mixing ratio	Max. 6 L per 20 kg bag

BASIS OF PRODUCT DATA

- All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.
- Internal Reference - Version: MBS_CC-KSA/ MEm_N 301_05_10/v 04/02_20

FURTHER DOCUMENTATION

General Method Statement (GMS)

IMPORTANT CONSIDERATIONS

SikaEmaco® N 301 should not be used in following cases:

- Leveling coat prior application of any rigid coating
- Trafficable areas
- Structural repairs of any type

When the application requires at high temperatures, use chilled water for mixing. For additional information on SikaEmaco® N 301 contact Sika Technical Department.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

It is essential that the surfaces to be bonded are sound, clean and uncontaminated. All loose powdering material must be removed. Concrete surfaces should be thoroughly soaked prior to application of SikaEmaco® N 301, to ensure a saturated, but surface dry condition.

MIXING

SikaEmaco® N 301 is formulated to give an easily mixed material. For full bag quantities, it is preferable to mix the material in a Crete angle or similar forced action mixer. Alternatively, a slow speed, handheld electric mixer with a suitable paddle shall be used. Overmixing should be avoided. When mixing full bags, pour 70% of water in the mixing vessel and commence mixing. Add the powder to the water whilst mixing. The remaining quantify of water shall be added to the mixer to achieve the desired consistency. Not more than 6 litres of water should be added per 20 kg of SikaEmaco® N 301.

Deeper voids such as blow holes should be filled prior to the application of SikaEmaco® N 301. A trowellable putty like mortar shall be prepared by reducing the amount of water when mixing for such applications.

APPLICATION METHOD / TOOLS

SikaEmaco® N 301 should be applied to the complete area with the minimum of trowelling. Leave for a short period before final trowelling. Finishing may be aided by flicking a small amount of water onto the surface, using a paint brush before final trowelling. When used as a "scrape coat" SikaEmaco® N 301 can be applied with a brush or roller and then the excess scraped off with the edge of a steel float.

CURING TREATMENT

Curing is not essential if the ambient and substrate temperature is below 35° C. SikaEmaco® N 301 is specially formulated to prevent shrinkage and cracking, however good curing practice is essential at high temperature conditions $\geq 35^{\circ}$ C. Particular care should be taken in hot and windy weather conditions by covering the work with a properly secured plastic sheeting. Alternatively, a single coat of Sika® Antisol®-181 shall be applied on the SikaEmaco® N 301. Sika® Antisol®-181 is a non degradable curing compound which is compatible with most of the subsequent protective coatings. For additional information on Sika® Antisol®-181, please contact Sika Technical Department.

CLEANING OF EQUIPMENT

Tools should be washed with water immediately after the use. Hardened material can only be removed mechanically.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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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ISO 9001, 14001, 45001 – SGS
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- Sika MB Construction Chemicals for Manufacturing LLC
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All products are supplied under a management system certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and ISO 45001.



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