PRODUCT DATA SHEET
Sika MonoTop®-160 Migrating

CEMENTITIOUS CRYSTALLISATION CONCRETE WATERPROOFING SLURRY

DESCRIPTION

Sika MonoTop®-160 Migrating is a 1-part, cementitious waterproofing slurry modified with selected aggregates and active chemicals. The active components migrate within the concrete pore and capillary network and reacts with the available moisture and free lime to form a non-soluble crystalline structure within the network. The slurry can be applied by brush or spray and provides a waterproof layer to prevent the penetration of water to all types of concrete structures.

USES

▪ Waterproofing structures such as basements, retaining walls, lift pits etc
▪ Waterproofing concrete elements
▪ Positive and negative waterproofing

CHARACTERISTICS / ADVANTAGES

▪ Migration of active components and crystalline formation to seal capillary network
▪ 1-part system, only needs the addition of water
▪ Slurry consistency for easy and fast application by brush or low pressure spray method
▪ For positive and negative waterproofing
▪ Excellent adhesion to concrete
▪ Water vapour permeable
▪ Application on concrete and repair mortars

APPROVALS / STANDARDS

▪ CE Marking and Declaration of Performance to EN 1504-2 - Surface protection systems for concrete - Coating.

PRODUCT INFORMATION

Chemical Base	Cement based, selected aggregates and active chemicals
Packaging	25 kg bags
Appearance / Colour	Grey powder
Shelf Life	6 months from date of production
Storage Conditions	Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +35 °C. Always refer to packaging.
Maximum Grain Size	Dmax: ~ 0,3 mm
Product Declaration	EN 1504-2 - Surface protection systems for concrete - Coating.

TECHNICAL INFORMATION

Tensile Adhesion Strength	~ 2.0 N/mm²	(EN 1542)
Reaction to Fire	Class A1	(EN 13501-1)

Permeability to Water Vapour	Class I (permeable)	S_D < 5 m	(EN ISO 7783-1)
Capillary Absorption	~0.,9 kg/m$^2 \cdot$ h^{0,5}		(EN 1062-3)
Water Penetration under Pressure	~ 3 times less penetration compared to reference sample (5 bar water pressure for 72 hours)		(EN 12390-8)
Water Penetration under Negative Pressure	~ 1,7 times less penetration compared to reference sample (5 bar water pressure)		(EN 12390-8, modified)

APPLICATION INFORMATION

Mixing Ratio	~9,2 litres of water for 25 kgs of powder
Fresh Mortar Density	~ 1,9 kg/l
Consumption	~1,2 kg/m^2 per layer. This figure is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.
Layer Thickness	~ 1,0mm
Ambient Air Temperature	+10 °C min / +35 °C max
Substrate Temperature	+10 °C min / +35 °C max
Pot Life	20–25 minutes at +20 °C
Waiting Time / Overcoating	Apply 2nd layer while 1st layer is still fresh (wet on wet, 1–2 hours at 20 °C)

APPLICATION INSTRUCTIONS

EQUIPMENT

Substrate preparation
▪ Mechanical or very high pressure water blasting
Mixing
▪ Low speed (< 500 rpm) hand drill mixer
▪ Mixing Container
Application
▪ Hand applied – slurry brush
▪ Wet Spray – Low pressure spraying machine
Curing
▪ Water spray equipment,moist geotextile membrane, polyethylene sheet

SUBSTRATE QUALITY / PRE-TREATMENT

All connections between the substrate and pipe entries, plant and equipment, light switches etc, must be sealed and made watertight before applying Sika MonoTop®-160 Migrating. Any joints which are present in the structure must also be sealed and made watertight.

The concrete substrate shall be thoroughly clean, free from dust, loose material, surface contamination, cement laitance and material which reduce adhesion or prevent suction or wetting by the slurry coating. Surfaces should be prepared by acceptable preparation equipment to an open texture to achieve the required adhesion value for the waterproofing system.

MIXING

Pour the minimum recommended clean water quantity in a suitable mixing container. While stirring slowly, add the full bag of powder continuously to the water. Once a consistent mix has been achieved, continue

mixing for 3 minutes. The consistency must be checked after every mix.

APPLICATION

Thoroughly saturate the prepared substrate before application with clean water to achieve a saturated surface dry (SSD) surface. Before application remove excess water, e.g. with a clean sponge.
General
Sika MonoTop®-160 Migrating must be applied to the full surface area at the required layer thickness.
Hand Application
Apply mixed material onto the prepared pre-wet substrate by suitable slurry brush by working the slurry well into the substrate and without the formation of voids. A 2nd layer should be applied 'wet on wet' after allowing 1st layer to slightly stiffen to ensure full coverage of the surface and avoid 'pin-holes'.
Sprayed Application - Wet Spray
The wet mixed Sika MonoTop®-160 Migrating shall be placed into the spraying equipment and applied onto the prepared pre-wet substrate. A 2nd layer should be applied 'wet on wet' after allowing 1st layer to slightly stiffen to ensure full coverage of the surface and avoid 'pin-holes'.

CURING TREATMENT

Protect fresh mortar immediately from premature drying using an appropriate curing method, e.g. water spray, moist geotextile membrane, polyethylene sheet, etc. Cure at least for 5 days after application.

CLEANING OF TOOLS

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

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mechanically removed.

LIMITATIONS

- Do not add water over recommended dosage
- Protect freshly applied material from freezing and rain at least during the curing time
- Avoid application in direct sun and/or strong wind
- Do not apply Sika MonoTop®-160 Migrating at temperatures below +10 °C
- Avoid any stagnant water presence or condensation / ponding on the surfaces before application
- Sika MonoTop®-160 Migrating is not suitable as a decorative treatment
- Sika MonoTop®-160 Migrating does not form a flexible coating and might crack under the subject of movement

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.

LOCAL RESTRICTIONS

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

ECOLOGY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

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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