

PRODUCT DATA SHEET

Sika MonoTop®-910 S

BONDING PRIMER AND REINFORCEMENT CORROSION PROTECTION CEMENT BASED SLURRY



DESCRIPTION

Sika MonoTop®-910 S is a cementitious, polymer modified one-component coating material containing silica fume used as bonding primer and reinforcement corrosion protection.

USES

- Suitable for control of anodic areas (Principle 11, method 11.1 of EN 1504-9)
- Suitable as a bonding primer as part of a concrete repair system
- Suitable as reinforcement corrosion protection as part of a concrete repair system

CHARACTERISTICS / ADVANTAGES

- CE certified to EN 1504-7
- Can be applied with a brush or by wet spray technique
- Easy to use just add water
- Good adhesion on concrete and steel

APPROVALS / CERTIFICATES

- CE-marking and Declaration of Performance as steel reinforcement protection mortar according to EN 1504-7:2006, based on certificate of factory production control issued by notified factory production control certification body and type testing.
- Certificate of suitability from the Chemical Laboratory of Seville, file 15-93, conforming its resistivity against oxidation, at a 2 mm thickness when applied on reinforcement, after being subjected to a >500 hrs exposure in an environment with salt spray and remained intact, without any trace of oxidation.

PRODUCT INFORMATION

Chemical base	Portland cement, silica fume, re-dispersible polymer powder, selected aggregates and additives
Packaging	4 kg plastic container
Appearance / Colour	Grey powder
Shelf life	12 months
Storage conditions	Store properly in undamaged original sealed packaging, in dry cool conditions
Density	Fresh mortar density ~ 2.10 kg/l

TECHNICAL INFORMATION

Compressive Strength	~50 MPa	(EN 12190)
Modulus of Elasticity in Compression	≥ 20 GPa	(EN 13412)
Tensile Strength in Flexure	~2.0 MPa	(EN 1542)
Coefficient of Thermal Expansion	~17.5 x 10 ⁻⁶ 1/K	(EN 1770)

SYSTEMS

System Structure	Sika MonoTop®-910 S is part of the range of Sika mortars complying with the relevant part of European Standard EN 1504 and comprising of:	
	Bonding Primer / Reinforcement	
	Corrosion Protection	
	Sika MonoTop®-910 S	Normal Use
	SikaTop® Armatec® 110 EpoCem®	Demanding requirements
	Repair Mortar	
	Sika MonoTop® repair mortars for normal and high protection	Concrete Repair Mortars
	SikaRep®	Concrete Repair Mortars
	Levelling Mortar	
	Sikagard®-720 EpoCem®	Demanding requirements

APPLICATION INFORMATION

Mixing Ratio	For brush application ~0.84 litre water (21%) per 4 kg powder For spraying application ~0.8 litre water (20%) per 4 kg powder
Consumption	As Bonding Primer - This depends on the substrate roughness and thickness of layer applied. As a guide, ~2.0 - 2.5 kg of powder per m ² and mm layer thickness. As Reinforcement Corrosion Protection - As a guide ~2.0 kg of powder per m ² per 1 mm layer thickness.
Yield	4 kg of powder yields approximately 2.3 litres of mortar
Layer Thickness	As bonding primer - sufficient to coat the concrete surface in a thin layer filling unevenness, pores and pits. As reinforcement corrosion protection - 2 mm minimum thickness.
Ambient Air Temperature	+5 °C minimum; +30 °C maximum
Substrate Temperature	+5 °C minimum; +30 °C maximum
Pot Life	~75 minutes at +20 °C
Waiting Time / Overcoating	Apply concrete repair wet on wet bonding primer Apply concrete repair wet on dry reinforcement corrosion protection

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 mortars. 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 EN 1504-10 for specific requirements.

MIXING

Sika MonoTop®-910 S can be mixed with low speed (< 500 rpm) hand drill mixer or by hand for a small quantity.

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.

APPLICATION

As Bonding Primer

Thoroughly pre-wet the prepared substrate, recommended 2 hours before application. Keep the surface wet and do not allow to dry. Before application remove excess water e.g. with a clean sponge. The surface shall appear a dark matt appearance without glistening and surface pores and pits shall not contain water. Using a suitably clean brush, roller or suitable spraying equipment apply a first layer to cover the substrate in a thin layer filling all unevenness, pits and pores.

As Reinforcement Corrosion Protection

Using a suitably clean brush or spraying equipment apply a first layer to cover the reinforcement bars approximately 1 mm thick. When first coat is hard to the finger nail, apply second layer approximately 1 mm thick. If using a spray method protect substrate from excessive over-spray, wiping away any concentrated accumulation and wait until completely dry before to apply repair mortar.

CURING TREATMENT

As reinforcement corrosion protection- protect the fresh mortar immediately from premature drying and contamination using an appropriate curing method

CLEANING OF EQUIPMENT

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

IMPORTANT CONSIDERATIONS

- Refer to the Method Statement for Concrete Repair using Sika MonoTop® system for more information or EN 1504-10
- Avoid application in direct sun and/or strong wind and/or rain
- Do not add water over recommended dosage
- Apply only to sound, prepared substrates

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.

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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.

ECOLOGY, HEALTH AND SAFETY

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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