# PRODUCT DATA SHEET

# Sika MonoTop®-111 AntiCorrosion

# CORROSION PROTECTION FOR REINFORCEMENT AND BONDING PRIMER



(EN 1542)

# **DESCRIPTION**

Sika MonoTop®-111 AntiCorrosion is a 1-component cementitious, polymer modified slurry containing silica fume, used as a corrosion protection for reinforcement and as bonding primer.

#### USES

- Reinforcement corrosion protection for concrete repair
- Bonding primer on concrete and mortar

# **CHARACTERISTICS / ADVANTAGES**

- Easy to mix, just add water
- User-friendly application
- Excellent adhesion to concrete and steel
- High resistance to water and chloride penetration
- Good mechanical strengths
- Applicable by brush or spray gun

# **APPROVALS / CERTIFICATES**

Corrosion protection mortar for repair and protection of concrete according to EN 1504-7:2006, Declaration of Performance: 44908616, certified by the notified factory production control certificatin body 0546, certificate of conformity of the factory production control 18774 and provided with the CE marking

# PRODUCT INFORMATION

Composition	Cement, selected aggregates and additives.	
Packaging	Box of 10 aluminium 2 kg-bag	
Appearance / Colour	Grey-green powder	
Shelf life	15 months	
Storage conditions	Store properly in undamaged original sealed packaging, in dry cool conditions.	
Density	Fresh mortar density: ~2.05 kg/l	
TECHNICAL INFORMA	TION	
Compressive Strength	~40 MPa after 28 days	(EN 12910)

~2.6 MPa after 28 days

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**Tensile Adhesion Strength** 

#### **SYSTEMS**

System Structure	Sika MonoTop®-111 AntiCorrosion is part of the Sika System for repair, according to the European Standard EN 1504 including following products: Sika MonoTop®-111 AntiCorrosion: bonding primer and anti-corrosion protection of steel reinforcement;
	Sika MonoTop® range: structural mortars for repair.

# APPLICATION INFORMATION

Mixing Ratio	~0.46 litres of water per each bag of 2 kg.  Reinforcement corrosion protection: As a guide, ~1.7 kg of powder per m² for 1 mm layer thickness (in total minimum 2 layers) Bonding primer: This depends on the substrate roughness and thickness of layer applied. As a guide, ~1.5–2.0 kg of product per m² per mm thick. Thickness 1.2–1.7 mm	
Consumption		
Yield	2 kg of powder yields approximately 1.2 litres of mortar.	
Ambient Air Temperature	+5 °C min. / +35 °C max.	
Substrate Temperature	+5 °C min. / +35 °C max.	
Pot Life	~30 minutes at + 20 °C	

# APPLICATION INSTRUCTIONS

#### **SUBSTRATE QUALITY / PRE-TREATMENT**

#### Steel reinforcement

Rust, mortar, concrete, dust and any other contaminants or loose material which can reduce bond or contribute to corrosion shall be removed.

Surfaces shall be prepared using abrasive blast cleaning techniques or high pressure water-blasting.

#### Concrete

The concrete shall be free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials. Delaminated, weak, damage concrete and, where necessary, sound concrete shall be removed by suitable means.

The surface must be dampened up to saturation, avoiding standing water. The surface shall achieve a dark matt appearance without glistening and surface pores and pits shall not contain water.

# MIXING

Sika MonoTop®-111 AntiCorrosion can be mixed with a low speed (<500 r.p.m) electric drill mixer. In small quantity, Sika MonoTop®-111 AntiCorrosion can also be mixed manually. Pour the water in the recommendedd proportion into a suitable mixing container. While stirring slowly, add the powder to the water and mix thoroughly to the required consistency (brushable, non-dripping).

#### **APPLICATION**

#### As a reinforcement protection

Apply a first layer approx. 1 mm thick using a medium hard brush over cleaned reinforcement. When first coat is tack-free, for guidance ~4 to 5 hours at +20 °C, apply a second layer approximately 1 mm thick.

#### As a bonding primer

Apply by brush or roller to the prepared (pre-wetted) substrate. To achieve good bond, Sika MonoTop®-111 AntiCorrosion must be applied exerting a good pressure onto the substrate, filling the unevenness. Subsequent repair mortar must be applied while the bonding primer is still fresh.

#### **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 regarding substrate preparation or refer to the recommedations provided in the standard 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
- Protect freshly applied material from freezing

#### **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 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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QUALITY MANAGEMENT SYSTEM UNI EN ISO 9001:2008 CERTIFIED BY CERTIQUALITY N. 951

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Sika MonoTop®-111 AntiCorrosion
June 2017, Version 01.01
020302020010000047

SikaMonoTop-111AntiCorrosion-en-IT-(06-2017)-1-1.pdf

