

#### **BUILDING TRUST**

# PRODUCT DATA SHEET

# SikaRep®

# Multi-Purpose Patching and Repair Mortar

# **DESCRIPTION**

SikaRep® is a one component, cement based, multipurpose patching and repair mortar, incorporating the use of micro-fibres.

# **USES**

- Sika Rep® can be used for the cosmetic or structural repair of deteriorated concrete and mortar. Sika Rep® can be used on exterior or interior, horizontal or vertical surfaces. Sika Rep® provides a compatible surface for the application of Sika's Coatings and Finishes. Sika Rep® is especially suitable for the following applications:
- Repair of concrete.
- Resurfacing defective or damaged areas.
- Concrete waterproofing and protection.
   NOTE: SR formulation available upon request.

# **FEATURES**

- One component: just add water.
- Easy to mix, apply and finish.
- Good adhesion to sound clean substrates (for enhanced adhesion properties use with Sika Latex).
- Shrinkage compensated.
- Compatible with the properties of typical concretes.
- Vapour permeable.
- Non-accelerated set to improve handling in hot temperatures.

#### **CERTIFICATES AND TEST REPORTS**

Sika Rep has been tested as per SCAQMD Rule 1168. Result: VOC Content < 100 g/L

# PRODUCT INFORMATION

Packaging	25 kg bag. Volume Yields 12 Litre /25 Kg Unit.	
Shelf life	12 months from data of production if stored properly in original unopened packing	
Storage conditions	In dry conditions, protected from direct sunlight and from moisture.	
Appearance and colour	Grey powder	
Density	2.0 - 2.1 kg/l.	

# **TECHNICAL INFORMATION**

Compressive strength	1 day 3 day 7 day 28day	18 N/mm2 35 N/mm2 40 N/mm2 45-55 N/mm2
		based on quality assurance laboratory: t temperature 20-23 °C, Humidity 60-65 % - Prisms (4cmx4cmx16
	cm).	t temperature 20-25 C, numuity 60-65 % - Prisms (4cmx4cmx16

#### Product Data Sheet

SikaRep®

March 2024, Version 01.01 020302040030000016

Flexural-strength	9.0 N/mm2
Tensile adhesion strength	2.5 N/mm2.

# APPLICATION INFORMATION

Layer thickness	Minimum layer thickness = 5 mm  Maximum layer thickness = 30mm  For thickness less than 5 mm, Sika Rep Fine® is available, where min thickness 0.5 mm and max thickness 5 mm per layer.	
Ambient air temperature	+8 °C min.	
Mixing ratio	4.25 - 4.5 litres of water per 25 kg bag.	
Substrate temperature	+8 °C min.	
Pot Life	~35 minutes at + 20 °C	
Curing time	For best results moist cure immediately after mortar reaches initial set (typically 1-2 hours depending on ambient temperatures), continue moist curing for minimum 48 hours.	

#### **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.

### **IMPORTANT CONSIDERATIONS**

- Refer to the Method Statement for Concrete Repair using Sika Rep® system for more information regarding substrate preparation
- Avoid application in direct sun and/or strong wind.
- Do not add water over recommended dosage
- Do not add cement or other admixtures, that can have negative effect on mortar characteristics
- Apply only to sound, prepared substrate
- Do not add additional water during the surface finishing as this will cause discoloration and cracking
- Protect freshly applied material from rain.

# **ECOLOGY, HEALTH AND SAFETY**

Safety Precautions: Protect skin and eyes from contact with mortar. Wear gloves and goggles. Accidental splashes to the eyes or mucous membrane must be rinsed with clean warm water. Seek medical attention without delay if required.

Ecology: Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities.

Toxicity: Non-Toxic under relevant health and safety codes.

Transport: Non-hazardous.

#### **APPLICATION INSTRUCTIONS**

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

Concrete or mortar surfaces must be clean, free from oil, grease and loosely adhering particles. Remove all loose materials mechanically, with a wire brush or

sand blasting. Metal Surfaces (steel and iron) should be free from scale, rust, oil and grease. Exposed steel should be protected with Sika Top Armatec® -108 or -110 Epocem. All repair area edges should be squared down a minimum 5mm. Pre-soak all repair areas with water. Allow surface to dry (S.S.D.) before applying Sika Rep®.

#### MIXING

For normal applications add 4.25 - 4.5 litres of water per 25 Kg bag of Sika Rep® depending on the desired consistency. Mixing can be achieved either manually or mechanically. Mechanical mixing is recommended by Sika for quantities greater than 1 bag. Mixing should continue for a max 5 minutes after all the contents of the bag are placed in the mix water.

#### **APPLICATION**

Pre-soak the repair surface with clean water and then allow surface to dry (Surface Saturated Dry-SSD). Prime Surface with a slurry of Sika Rep® using a stiff brush. The recommended slurry consists of 5.0 - 5.5 litres of water per 25 Kg of Sika Rep® . While the slurry coat is still damp, apply Sika Rep® to a maximum thickness of 30 mm and compact thoroughly by trowel. For enhanced bonding characteristics use Sika Latex® in the slurry mix or use Sika Top Armatec® -110 Epocem as the bonding medium.

#### **CURING TREATMENT**

Use approved curing methods.

For best results moist cure immediately after mortar reaches initial set (typically 1-2 hours depending on ambient temperatures), continue moist curing for minimum 48 hours. Use of a proprietary curing compound, like Antisol® -E, can be used.

#### **CLEANING OF EQUIPMENT**

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

**Product Data Sheet** 

SikaRep<sup>®</sup>

March 2024, Version 01.01 020302040030000016



#### 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.

# **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

# Sika Egypt

1st Industrial Zone (A) Section #10, Block 13035 El Obour City, Egypt TEL: +202 44810580 FAX: +202 44810459 egy.sika.com







Product Data Sheet

SikaRep®

March 2024, Version 01.01 020302040030000016



