

# PRODUCT DATA SHEET

# Sikagard®-63 N

### 2-PART EPOXY PROTECTIVE COATING

# **PRODUCT DESCRIPTION**

Sikagard®-63 N is a two part, rigid, total solid, coloured epoxy resin based protective coating.

#### **USES**

Sikagard®-63 N may only be used by experienced professionals.

- Chemical resistant protective layer on concrete, stone, cementitious mortars and renderings, epoxy cement, epoxy resin based products and steel
- Lining in storage tanks and silos
- Anti-corrosion coating on steel in food processing plants, sewage works, farms, agricultural enterprises, chemical and pharmaceutical facilities and beverage industry

# **CHARACTERISTICS / ADVANTAGES**

- Solvent free
- Good mechanical and chemical resistance
- High build
- Impervious to liquids
- Easy to mix and to apply

## **ENVIRONMENTAL INFORMATION**

Conformity with LEED v2009 IEQc 4.2: Low-Emitting Materials - Paints and Coatings

# **APPROVALS / STANDARDS**

Coating for concrete protection according the requirements of EN 1504-2/2004, DoP 0206060100300000011008, certified by FPC Notified Body and provided with CE-Marking.

#### PRODUCT INFORMATION

Chemical Base	Epoxy resin		
Packaging	Part A	8.70 kg drums	
	Part B	1.3 kg drums	
Appearance / Colour	Grey, Red, Green		
Shelf Life	12 months from date of production		
Storage Conditions	The packaging must be stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between +5 °C and +30 °C. Protected from direct sunlight.		

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Density	Mixed resin ~1.35 kg/l	(EN ISO 2811-1)	
	Density values determined at +23 °C		
Solid Content	~100 %		
TECHNICAL INFORMATION			
Tensile Adhesion Strength	> 1.5 N/mm² to concrete	(ISO 4624)	
	> 15 N/mm² to steel	(EN 24624)	
	>10 N/mm² to aluminium	(EN 24624)	
Chemical Resistance	For further information please contact Sika Technical Service.		
Thermal Resistance	Exposure	Dry heat	
	Permanent	+40 °C	
	max. 3 days	+60 °C	
Diffusion Resistance to Water Vapour	μH <sub>2</sub> O ~ 100 000	(EN ISO 7783-1)	
APPLICATION INFORMATION	N		
Mixing Ratio	Part A: Part B = 83: 17 by weight		
Consumption	~0.15 kg/m² per layer		
Layer Thickness	~0.1 mm per layer		
Ambient Air Temperature	+10 °C min. / +30 °C max.		
Relative Air Humidity	< 80 %		
Substrate Temperature	+10 °C min. / +40 °C max. Minimum 3 °C above dew point, beware of condensation		
Pot Life	Temperature Time		
	+10 °C ~30 min		
	+20 °C	~20 min	

+30 °C

+10 °C

+20 °C

+30 °C

**Temperature** 

#### APPLICATION INSTRUCTIONS

## **SUBSTRATE QUALITY**

Waiting Time / Overcoating

The substrate must be sound, clean, dry, free from contaminants such as dirt, grease, oil, old coatings, release agents, laitance and other adhesion preventing or influencing substances.

On high absorbent, non-sound, contaminated, not cement based substrates precautions have to be taken and a suitable primer has to be used.

#### SUBSTRATE PREPARATION

#### **Concrete Substrates**

Concrete substrate must be prepared mechanically to achieve an open textured surface.

Weak areas in the substrate must be removed and surface defects such as blowholes and voids must be

#### fully exposed.

Min.

~9 hours

~5 hours

~4 hours

All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum. Open voids and blowholes need to be closed with a suitable Sika® pore filling mortar. The roughness of the substrate needs to be levelled with a suitable Sika® rendering and levelling mortar.

**Full Cure** 

~14 days

~9 days

~5 days

~10 min

3 days

~2 days

~1 day

Max.

#### **Steel Surface**

Steel surface must be prepared mechanically using abrasive blast cleaning. The level SSPC-SP 10 "near white metal blast cleaned" or level Sa 2 1/2 according to ISO EN 12944-4 has to be achieved. Welds and joints have to be prepared according to EN 14879, part 1. After blast cleaning remove all dust dirt and blasting material. In order to maintain the surface conditions after blast cleaning air-conditioning is recommended.

#### MIXING



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Prior to mixing stir part A mechanically. When all of part B has been added to part A mix continuously for 3 minutes until a uniform mix has been achieved. Use a low speed electrical stirrer (300–400 rpm) to avoid air entrapment. To ensure proper mixing pour material into a clean container and stir again.

#### APPLICATION

Apply by brush, roller or airless spray.

#### **CLEANING OF TOOLS**

Clean all tools with Thinner C immediately after use. Hardened and/or cured material can only be removed mechanically.

#### **LIMITATIONS**

- Do not apply Sikagard®-63 N on moist substrates.
- Sag resistance on vertical surface is < 100 μm.</li>
- Sikagard®-63 N cannot be used to produce glass fibre reinforced linings.
- Freshly applied Sikagard®-63 N must be protected from rain, condensation and water for at least 24 hours.
- For exact colour matching ensure using material from the same control batch numbers.

#### **VALUE BASE**

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.

# DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

According to the EU-Directive 2004/42, the maximum allowed content of VOC (Product category IIA / j type sb) is 500 g/l (Limits 2010) for the ready to use product. The maximum content of Sikagard®-63 N is <500 g/l VOC for the ready to use product.

#### **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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