BUILDING TRUST

PRODUCT DATA SHEET

Sikagard®-63 N

Novolac Epoxy chemical resistant protective coating

DESCRIPTION

Sikagard®-63 N is a 2-part,novolac epoxy resin based, chemical resistant, protective coating. It can be used on many types of structures or elements for cementitious, metallic and epoxy resin binder substrates. The chemical resistant properties provides surface protection from aggressive chemicals that can cause rapid degradation.

USES

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

Chemical resistant protective coating on:
- Concrete
- Stone
- Cementitious mortars
- Renderings
- Epoxy cement
- Epoxy resin-based products
- Steel

Chemical resistant protective lining for:
- Silos
- Bund linings
- Chemical mixing tanks
- Chemical containment tanks
- Fuel and oil tanks
- Sludge tanks
- Industrial chemical areas

Anti-corrosion coating on steel elements within:
- Food processing plants
- Sewage treatment works
- Chemical and pharmaceutical facilities
- Beverage facilities

CHARACTERISTICS / ADVANTAGES

- Good chemical resistance
- Good temperature resistance
- Low VOC emissions
- High build
- Impervious to liquids
- Easy to mix
- Applied by brush, roller or airless spray

SUSTAINABILITY

- Conformity with LEED v4 MRc 4 (Option 2): Building Product Disclosure and Optimization - Material Ingredients
- Conformity with LEED v2009 IEQc 4.2: Low-Emitting Materials - Paints and Coatings

APPROVALS / CERTIFICATES

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

PRODUCT INFORMATION

Product declaration	EN 1504-2 - Surface protection product for concrete - Coating
Composition	Epoxy resin
Packaging	Part A: 8,70 kg container Part B: 1,3 kg container Refer to current price list for packaging variations
Shelf life	12 months from date of production
Storage conditions	The product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +5 °C and +30 °C. Always refer to packaging.
Appearance and colour	Standard colour: ~RAL 7032 (pebble grey) Other colours on request.
Density	Resin mixed:~ 1,44 kg/l (EN ISO 2811-1) Value at +23 °C

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)
Temperature resistance	**Exposure** / **Dry heat** Permanent / +40 °C Maximum 3 days / +60 °C
Diffusion resistance to water vapour	μH_2O ~100 000 (EN ISO 7783-1)
Chemical resistance	Resistant to many chemicals. Contact Sika Technical Services for additional information.
Resistance to UV exposure	Loss of gloss, yellowing and chalking will occur with UV exposure. This will not compromise performance.

APPLICATION INFORMATION

Mixing ratio	Part A : Part B = 87 : 13 by weight
Consumption	~0.25-0.4 kg/m² per layer
Layer thickness	~175-275 microns per layer.
Ambient air temperature	+10 °C min. / +30 °C max.
Relative air humidity	≤ 80 %
Dew point	Beware of condensation. The substrate and uncured applied floor material must be at least +3 °C above dew point to reduce the risk of condensation or blooming on the finish.
Substrate temperature	+10 °C min. / +40 °C max
Substrate moisture content	Substrate moisture content Maximum 4% when measures using Sika® - Tramex meter (at the time of application). Please note that the moisture content must be < 4 % pbw when using the CM measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).

Pot Life

Temperature	Time
+10 °C	~30 minutes
+20 °C	~20 minutes
+30 °C	~10 minutes

Waiting time to overcoating

Temperature	Min.	Max.	Full Cure
+10 °C	~9 hours	~3 days	~14 days
+20 °C	~5 hours	~2 days	~9 days
+30 °C	~4 hours	~1 day	~5 days

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

- Do not apply Sikagard®-63 N on moist substrates.
- Sag resistance on vertical surface is < 100 µm.
- Do not use to produce glass fibre reinforced linings.
- Protect freshly applied product from rain, condensation and water for at least 24 hours.
- For consistent colour matching, ensure the Sikagard®-63 N in each area is applied from the same control batch numbers.

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.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

Substrates must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings, laitance, surface treatments, loose friable materials and and any other surface contaminants that could affect adhesion.

SUBSTRATE PREPARATION

Concrete / Stone / Cementitious mortars & rendering
Concrete must be at least 3–6 weeks old.
Substrates must be prepared mechanically using suitable abrasive blast cleaning or planing / scarifying equipment to remove cement laitance and achieve an open textured gripping surface profile suitable for the product thickness.
High spots can be removed by grinding.
Weak substrates must be removed and surface defects such as blow holes and voids must be fully exposed.
Repairs to the substrate, filling of cracks, blowholes/voids and surface levelling must be carried out using products from the Sikafloor®, Sikadur®, Sikagard® and Sika Monotop® range of materials.
Products must be cured before applying Sikagard®-63 N.
Steel / aluminium
Surfaces must be prepared mechanically using suitable abrasive blast cleaning, grinding, rotating wire brush or other suitable equipment to achieve a bright metal finish. Reference must be made to the preparation levels in the following standards if compliance is required:
ISO EN 12944-4: level Sa 2 ½
NACE International Standard: SSPC-SP 10 “near white metal blast cleaned”
EN 14879, part 1
Apply a suitable compatible primer on the prepared steel as soon as possible to prevent oxide development. Contact Sika Technical Services for additional
Epoxy resin-based products
Surfaces must be prepared by abrading using suitable equipment.
General
On high absorbent, non-cementitious based substrates a suitable primer must be used. Contact Sika Technical Services for additional information.
All dust, loose and friable material must be completely removed from all surfaces before application of the product and associated system products, preferably by vacuum extraction equipment.
Avoid dew point conditions before and during product application.

MIXING

Prior to mixing all parts, mix part A (resin) using an electric single paddle mixer (300–400 rpm) or other similar equipment to mix liquid and all the coloured pigment until a uniform colour has been achieved. Add part B (hardener) to part A and mix part A + B continuously for 3,0 minutes until a uniformly coloured mix has been achieved. To ensure thorough mixing, pour materials into a clean container and mix again for at least 1,0 minute to achieve a smooth consistent mix. Excessive mixing must be avoided to minimise air entrainment. During the final mixing stage, scrape down the sides and bottom of the mixing container with a straight edge trowel or spatula at least once to ensure complete mixing. Mix full units only.

Mixing time for A+B = ~4,0 minutes

APPLICATION

Reference must be made to further documentation where applicable, such as relevant method statement, application manual and installation or working instructions.
Prior to application, confirm substrate moisture content, relative air humidity, dew point, substrate, air and product temperatures.
Apply Sikagard®-63 N onto the prepared substrate evenly using a roller, brush or airless spray at the required consumption rate.

CLEANING OF EQUIPMENT

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

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.

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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