BUILDING TRUST

PRODUCT DATA SHEET

Sikagard®-850 AG

PERMANENT CLEAR ANTI-GRAFFITI AND ANTI-FLYPOSTER COATING

PRODUCT DESCRIPTION

Sikagard®-850 AG is a 1- part, polyorganosiloxane-based, permanent anti-graffiti and anti-flyposter clear coating. It protects concrete, wood and masonry substrates from rain, sun and temperature extremes.

USES

As a permanent anti-graffiti and anti-flyposter coating for:
- Fair faced concrete, masonry
- Coated concrete, masonry
- Mineral substrates previously treated with a hydrophobic impregnation
- Wooden surfaces (coated or uncoated)

Suitable for:
Moisture control (Principle 2, method 2.3 of EN 1504-9)

CHARACTERISTICS / ADVANTAGES

- Permanent – graffiti can be removed many times without damaging the protection or requiring a refresher coat
- Poster prevention – flyposter does not bond onto treated substrate
- Clear wet-look finish
- Brightens and enhances the substrate colour
- No chemical agents required for cleaning
- Cleaning requires only cold-water pressure (80 to 100 bar) or cold-water low pressure washing and rubbing down with a clean cloth or scrubbing brush
- Water vapour permeable
- Low water absorption
- Very good resistance against weathering and ageing
- Good resistance to UV exposure
- Retains gloss finish
- Applied by brush, roller or
- Very low dirt pick-up
- Can be tinted on site with pigment

APPROVALS / STANDARDS

- CE Marking and Declaration of Performance to EN 1504-2 - Surface protection product for concrete - Coating
- Adhesion, Water Permeability and Water Vapour Diffusion tests EN 1542, EN ISO 7783, EN 1062-3, Sikagard®-850 AG, Applus, Test report No. 17/14156-666

PRODUCT INFORMATION

Chemical Base	Polyorganosiloxanes polymer and solvent	
Packaging	25 kg container or 180 kg drum 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.	
Density	~0,939 kg/l (at +20 °C)	(DIN 51757)
Flash Point	~+54 °C	(ISO 3679)
Solid Content	> 90 %	
Volatile organic compound (VOC) content	< 140 g/l (calculated)	
Product Declaration	EN 1504-2: Surface protection product for concrete - Coating	

SYSTEM INFORMATION

System Structure

System part	Product
Primer for coated mineral surfaces	Sika® Primer-790
Sikagard®-850 AG thinner	White spirit
Colouring pigment	Suitable for solvent - based products
Protective coating	Sikagard®-850 AG

APPLICATION INFORMATION

Thinner	Sikagard®-850 AG must be thinned to the required application viscosity with white spirit. Refer to application instructions.	
Consumption	Top coat: ~150 to 250 g/m² These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc. 1 coat is sufficient on suitably prepared, uniform and primed substrates.	
Layer Thickness	Dry film thickness (DFT) ~150 to 300 µm These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc	
Ambient Air Temperature	+8 °C min. / +35 °C max.	
Relative Air Humidity	< 80 %	
Dew Point	Substrate and ambient temperature must be at least +3 °C above dew point	
Curing Treatment	No special curing requirements, but must be protected immediately from rain for at least 4 to 5 hours at +20 °C.	
Applied Product Ready for Use	Final drying	up to ~24 hours at +20 °C for thick film build-up
	Full cure	~7 days

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

The substrate can be one of the following materials:

- Fair faced concrete, masonry
- Coated concrete, masonry
- Mineral substrates (e.g. concrete or plaster) previously treated with a hydrophobic impregnation
- Wooden surfaces (coated or uncoated)

Important: On substrates with a rough surface profile, it will be difficult to produce an even coating thickness. This may result in reduced protection. Pre-levelling or smoothing the surface is recommended before coating application.

Substrate without existing treatment

- Substrates must be clean, dry and free of all contaminants such as dirt, oil, grease and loose friable particles.
- Prepare substrates using preparation equipment and methods such as: abrasive sanding tools, steam cleaning, blast cleaning or high- pressure water jetting.
- Use products from the Sika MonoTop® range of materials for surface levelling, filling blow holes or repairs to concrete / cementitious substrates.

Exposed substrate with existing treatment

- Mineral surfaces previously treated with a hydrophobic impregnation, do not require specific treatment before application of Sikagard®-850 AG.
- Prime with Sika® Primer-790, mineral substrates coated with organic paints / coatings.
- Treated substrates must be clean, dry, sound, firmly bonded, free of all contaminants and loose friable particles.
- Prepare substrates using preparation methods such as: abrasive sanding tools, steam cleaning, blast cleaning or high-pressure water jetting.

APPLICATION

PRIMER

Important: On rough substrates, use a brush to apply primer and make sure the primer covers all the surface including voids.

Important: Allow the surface to dry and become tack-free before applying the top coat (~2–3 hours depending on weather conditions).

Important: Allow Sika MonoTop mortars to cure for 3–5 days before applying primer.

Mineral uncoated substrates (including Sika MonoTop® products)

1. Dilute Sikagard®-850 AG with ~50 % (by weight) of white spirit.
2. Apply the diluted product evenly over the prepared substrate with a brush or fleece roller.

Mineral coated substrates

Apply Sika® Primer-790 evenly over the prepared substrate with a brush or fleece roller.

Wood (coated and uncoated)

Does not require priming

TOP COAT

Important: Do not use aerosol car body type spraying equipment

Application by brush or fleece roller

Note: Dilute Sikagard®-850 AG with ~30 % (by weight) of white spirit over Sika MonoTop® mortars.

1. Dilute Sikagard®-850 AG with ~20 % (by weight) of white spirit.
2. If required, mix the coloured pigment into the diluted product until fully dispersed and a uniform colour is achieved
3. Apply the diluted product evenly over the prepared substrate with a brush or long-haired fleece roller.

Application by airless spray

Note: The airless spray may not give a smooth or acceptable finish. It may be necessary to back-roll the coating with a roller to ensure a suitable finish and film build-up.

Requirement: Airless spraying characteristics:

- Pressure: 220 to 250 bar (3200–3600 psi)
- Hose diameter: ~10 mm (3/8")
- Tip: 0,13° to 0,17°
- Filter: 60 mesh

1. Dilute Sikagard®-850 AG with ~30 % (by weight) of white spirit.
2. If required, mix the coloured pigment into the diluted product until fully dispersed and a uniform colour is achieved
3. Apply the diluted product evenly over the prepared substrate with spraying equipment.

CLEANING OF TOOLS

- Clean all tools and application equipment with white spirit immediately after use. Hardened material can only be mechanically removed.
- Clean airless spray equipment at regular intervals to prevent harden silicon particles blocking the spraying tip.

MAINTENANCE

CLEANING

Graffiti Removal

Important: Do not use rotating nozzle on high-pressure cleaning equipment.

As a general rule, always remove graffiti as soon as possible using either of the 2 options:

1. Cold-water high-pressure jetting / cleaning equipment (~80 bar / 1200 psi).
2. Cold-water low pressure washing and rubbing down with a suitable absorbent clean cloth or scrubbing brush.

Poster removal

Posters applied with water-based paste glues, do not bond on substrates treated with Sikagard®-850 AG. They will either fall under their own weight or they can be easily removed with minimal effort.

LIMITATIONS

- Sikagard®-850 AG is intended for use in industrial and commercial applications where personal protective equipment is required and mandatory.
- Do not use for aerosol-based applications. Sikagard®-850 AG applied using this application, disperses free aerosol vapour droplets in the air. Breathing in these droplets can cause extremely serious health risks to the user.
- When the container is opened, any remaining product inside the container that has been exposed to the air, will continue to cure and thicken resulting in surface skinning and increased viscosity. It is therefore advised to use up all the product once it is opened until the container is empty.
- The product can be used after a few days of opening the container, providing the skin layer is removed.
- Other solvents may be used instead of white spirit,

however they must be tested to ensure clarity of the coating, compatibility, solvency and stability. Weak solvents can lead to reduced performance. Contact Sika Technical Services for additional information
- Do not use methyl acetate as a thinner.

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/CE, the maximum allowed content of VOC (product category IIA / i type sb) is 500 g/l (Limits 2010) for the ready to use product.
The maximum content of Sikagard®-850 AG 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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