

## **BUILDING TRUST**

## PRODUCT DATA SHEET

# Sikagard®-850 AG

### Permanent clear anti-graffiti and anti-flyposter coating

#### **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-fly poster coating on the following substrates:

- Fair faced concrete, masonry, cementitious render
- Coated concrete, masonry, cementitious render
- Coated concrete, masonry, cementitious render previously treated with a hydrophobic impregnation
- Coated or uncoated wood

#### Suitable for:

 Moisture control (Principle 2, method 2,3 of EN 1504-9)

### **CHARACTERISTICS / ADVANTAGES**

- Permanent graffiti can be removed typically up to 10 times without damaging the protection or requiring a refresher coat when using non-aggressive cleaning techniques.
- 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 or roller
- Very low dirt pick-up
- Can be tinted on site with coloured pigment compatible with solvent based coatings

## **APPROVALS / CERTIFICATES**

- 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

Product declaration	EN 1504-2: Surface protection product for concrete - Coating	
Composition	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	

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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	Final applied finish: gloss / clear	
Density	~0,939 kg/l (at +20 °C)	(DIN 51757)
Flash point	~+54 °C	(ISO 3679)
Solid content by mass	> 90 %	
Volatile organic compound (VOC) content	< 140 g/l (calculated)	

## **SYSTEM INFORMATION**

System structure	System part	Product
	Primer for coated mineral surfaces	Sikagard®-850 Activator
	Sikagard®-850 AG thinner	White spirit
	Coloured pigment	Suitable for solvent - based products
	Top coat	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	Note:Generally, 1 coat is sufficient on a suitably prepared, uniform and primed substrate.  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, wastage or any other variations. Apply product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.		
Layer thickness	Dry film thickness (DFT) $^{\sim}150$ to 300 $\mu m$ These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.		
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		
Applied product ready for use	Final drying	up to ~24 hours at +20 °C for thick film build-up	
	Full cure	~7 days	
	Times are approximate and will be affected by film thickness and changing ambient conditions particularly temperature and relative humidity.		



#### **BASIS OF PRODUCT DATA**

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

#### IMPORTANT CONSIDERATIONS

- 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.

### **ECOLOGY, HEALTH AND SAFETY**

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains 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  $\leq$  500 g/l VOC for the ready to use product.

#### APPLICATION INSTRUCTIONS

#### SUBSTRATE QUALITY / PRE-TREATMENT

#### **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.

Note:For surface levelling, filling blow holes or repairs to concrete, masonry and cementitious render, use suitable products from the Sika MonoTop® range.

## Substrate without existing coating or hydrophobic impregnation

- Substrate must be clean, dry, sound and free of all contaminants such as dirt, oil, grease and loose friable material which can reduce the adhesion of the coating.
- Prepare the substrate using mechanical preparation equipment such as abrasive sanding tools, steam cleaning, blast cleaning or low / high - pressure water jetting.

#### Substrate with existing coating

- Substrate coating must be clean, dry, firmly bonded and free of all contaminants such as dirt, oil, grease and loose friable material which can reduce the adhesion of the coating.
- Prepare the substrate using mechanical preparation equipment such as abrasive sanding tools, steam cleaning, or low - pressure water jetting.

#### Substrate with hydrophobic impregnation

- Substrate must be clean, dry, sound and free of all contaminants such as dirt, oil, grease and loose friable material which can reduce the adhesion of the coating.
- Clean the substrate using steam cleaning, blast cleaning or low / high - pressure water jetting equipment.

#### **APPLICATION**

Strictly follow installation procedures as defined in method statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

#### **IMPORTANT**

Existing coatings must be tested to confirm their compatibility with Sikagard®-850 Activator and Sikagard®-850 AG.

#### **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 primer 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.

## Substrate without existing coating (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 using a brush or fleece roller at the required consumption rate.
- 3. The primer must be continuous and pore free.

### Substrate with existing coating

- Apply Sikagard®-850 Activator evenly over the prepared substrate using a brush or fleece roller at the required consumption rate. Refer to Product Data Sheet.
- 2. The primer must be continuous and pore free.



#### Substrate with hydrophobic impregnation

- Dilute Sikagard®-850 AG with ~50 % (by weight) of white spirit.
- 2. Apply the diluted product evenly over the prepared substrate using a brush or fleece roller at the required consumption rate.
- 3. The primer must be continuous and pore free.

Wood (coated and uncoated)

Does not require priming

#### **TOP COAT**

Application by brush or fleece roller (long-haired)
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.
- 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.
- 4. The coating must be continuous, pore free and to the required surface finish.
- 5. Protect Product from heavy rain or rain showers until dry to prevent surface damage

## Application by airless spray IMPORTANT

Do not use aerosol car body type spraying equipment. 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

- Dilute Sikagard®-850 AG with ~30 % (by weight) of white spirit.
- If required, mix the coloured pigment into the diluted product until fully dispersed and a uniform colour is achieved.
- Spray apply the Product in a continuous operation and at a speed to achieve a consistent thickness.
- 4. The coating must be continuous, pore free and to the required surface finish.
- 5. Protect Product from heavy rain or rain showers until dry to prevent surface damage.

#### **CLEANING OF EQUIPMENT**

- 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.

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#### **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:

- Cold-water high-pressure jetting / cleaning equipment (~80 bar / 1200 psi) from a distance of ~10 cm from the substrate.
- Cold-water low pressure washing and rubbing down with a suitable absorbent clean cloth or a soft 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 can easily be removed with minimal effort.

### **LOCAL RESTRICTIONS**

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

#### **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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