BUILDING TRUST
CONSTRUIRE LA CONFIANCE

PRODUCT DATA SHEET

Sikagard®-5850

Water-repellent, permanent anti-graffiti and anti-fly poster coating

PRODUCT DESCRIPTION

Sikagard®-5850 is a 1-part ready to use, polyorganosiloxane based, water-repellent, permanent anti-graffiti and antifly poster coating.

WHERE TO USE

As a permanent non-sacrificial anti-graffiti and anti-fly poster coating on the following substrates:
- Non coated grey concrete and cementitious render

CHARACTERISTICS / ADVANTAGES

- Ready to use - no dilution with solvent at job site.
- Hydrophobic - repels liquid water while being water vapour permeable.
- Permanent/non-scarificial – graffiti can be removed typically up to more than 10 times without damaging the protection or requiring a refresher coat when using non-aggressive cleaning techniques.
- Poster prevention – fly poster does not bond onto protected substrate or can be easily removed, even after many cleaning cycles.
- 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.
- Low water absorption.
- Very good resistance against weathering and ageing.
- Good resistance to UV exposure.
- Applied by brush, roller or airless spray.
- Very low dirt pick-up.

APPROVALS / CERTIFICATES

- ASTM D7089: Effectiveness of anti-graffiti coating by pressure washing: Cleanability Level 1
- ASTM D6578: Graffiti resistance: Class 10
- Quebec DOT (MTMD) approved
- City of Montreal approved
- Recognized by the British Columbia Ministry of Transportation and Infrastructure (BC MoTI) (use with SikaLatex® R)

PRODUCT INFORMATION

Composition / Manufacturing	Polyorganosiloxanes polymer and solvent
Packaging	18.9 L (5 US gal.) pail
Appearance / Colour	Final applied finish: mat
Shelf Life	6 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 (41 °F and 86 °F). Always refer to packaging.

Density	0.93 g/mL
Solid content by weight	65 - 70 %

TECHNICAL INFORMATION

Chemical Resistance (ASTM D1308)

	1 day	7 days
Water	No effect	No effect
Water + Calcium Chloride (10%)	No effect	No effect
Motor Oil	No effect	No effect
Fuel	No effect	No effect
Diesel	No effect	No effect
Ethylene Glycol	No effect	No effect

Resistance to UV Exposure	UV resistant	(ASTM D4329)
Permeability to Water Vapour	Permeance: 30.8 perm (@ 4 mils dft)	(ASTM D1653)
Tensile Resistance	Elongation > 150 %	(ASTM D638)
Adhesion in Peel	Adhesion rating: 8 (coating is difficult to remove)	(ASTM D6677)

APPLICATION INFORMATION

Yield	~3.94 to 5.62 m²/L to achieve a 7 - 10 mils w.f.t (4.5 - 6.5 mils d.f.t) per coat. Note: Generally, 1 coat is sufficient on a suitably prepared, uniform substrate. This consumption is 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. (46 °F min. / 95 °F max)
Relative Air Humidity	≤ 80 %
Dew Point	Substrate and ambient temperature must be at least +3 °C above dew point.
Curing Time	No special curing requirements, but must be protected immediately from rain for at least 4 to 5 hours at +20 °C (+ 68 °F).
Drying time	4 - 6 h when cured at 23° C and 50 % H.R.

SYSTEMS

System Structure

System part	Product
Primer (optional): to reduce wet look finish (see "surface preparation")	SikaLatex® R
Top coat	Sikagard®-5850

Dry film thickness	4.5 - 6.5 mils (refer to Yield section for consumption)

System Performance	Effectiveness of anti-graffiti coating by pressure washing: Cleanability Level 1: Graffiti completely removed with high-pressure cold water wash.	(ASTM D7089)
	Graffiti resistance: Class 10	(ASTM D6578)

BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

WHERE TO USE

- Sikagard®-5850 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®-5850 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.

ENVIRONMENT, HEALTH & SAFETY

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

- For concrete surface preparation, refer to the ICRI No. 310.2R guideline and provide a CSP 1-2.
- 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.
- On substrates with a rough surface profile, it will be difficult to produce an even coating thickness. This may result in reduced protection and cleanability. Prelevelling or smoothing the surface is recommended before coating application.

SURFACE PREPARATION

OPTIONAL

To reduce the wet look, SikaLatex® R should be used as a primer as follows:

1. Apply one coat of SikaLatex® R with a roller at a coverage rate of 4.9 m²/L (200 ft²/US gal) to 8.8 m²/L (360 ft²/US gal), depending on the porosity of the concrete
2. Application of Sikagard®-5850 may begin 1 hour after the wet film left by SikaLatex® R on the surface has dried. There should be no visible traces of SikaLatex® R on the surface (depending on temperature, relative humidity, and the moisture content of the concrete)

MIXING

Pre-stir the Sikagard®-5850 for 1 to 2 minutes.

APPLICATION

Always perform an application test in an inconspicuous area to confirm appearance before applying to the designated area where the application will take place.

Application by brush or fleece roller

- Apply the Sikagard®-5850 evenly over the surface
- The coating must be continuous, pore free and to the required surface finish
- Protect Sikagard®-5850 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.

- Spray apply the Sikagard®-5850 in a continuous operation and at a speed to achieve a consistent thickness.
- The coating must be continuous, pore free and to the required surface finish.
- Protect Sikagard®-5850 from heavy rain or rain showers until dry to prevent surface damage.

CLEAN UP

- 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:

- Cold-water high-pressure jetting / cleaning equipment from 80 to 100 bar (1200 to 1500 psi) from a distance of approx. 100 mm (4 in) 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®-5850.

They will either fall off 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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: www.sika.ca

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