

Sikagard® AG

Water-Borne, Fluoro Polyurethane Based and Semi Sacrificial Anti-Graffiti Sealer

Description Sikagard® AG is a two component, water-dispersed, clear and aliphatic fluoropolyol polyurethane based sealer. It is designed to provide resistance to the permanent defacement of public and private structures by most aerosol paints, markers and crayons. Providing a semi-sacrificial film over concrete, masonry and some painted surfaces, it prevents graffiti from being absorbed into porous substrates or distressing existing finishes. It also allows repeated removal of graffiti using the specifically formulated Sikagard® AG Cleaner.

Where to Use

- As a sealer for above grade, exterior application onto concrete or masonry buildings and civil engineering structures prone to vandalism, including graffiti.
- As a clear finish, applied onto existing coatings to provide or upgrade anti-graffiti performance.

Advantages

- Supplied pre-proportioned; add two components, mix and apply.
- Easy and economic to apply; low viscosity coating with high coverage rate.
- Applied by brush, roller or spray; no specialist equipment necessary.
- One coat application only; unlike more complicated systems
- Compatible with many existing coatings; used in renovation and new construction
- Water clear, gloss appearance; protective and decorative appearance.
- Enables removal of graffiti and simple replenishment when required. (semi-sacrificial)
- Water-based, environmentally-friendly product.

Technical Data		
Packaging	Sikagard® AG	8 L (2.1 US gal.) kit Component A: 7.07 L (1.9 US gal.) pail Component B: 0.93 L (0.25 US gal.) can
	Sikagard® AG Cleaner	10 L (2.6 US gal.) can
Colour & Appearance	Clear, gloss finish	
Yield	6 - 7.5 m ² /L (240 - 300 ft ² /US gal.) at 5 - 6 mils wet film thickness. A single coat, applied in two passes working wet on wet is normally recommended to achieve complete coverage and protect against graffiti contact with background substrates. Consumption is dependent on absorption and texture of surfaces. Coverage will be reduced on rough and permeable masonry surfaces: allowance must be made for profile, porosity, loss and waste. A test application may be necessary to establish the practical coverage rate.	
Shelf Life	9 months in original, unopened containers. Store and transport dry at 5 - 35°C (40 - 95°F). Condition material to at least 15°C (60°F) before using. Protect from freezing. If frozen, discard.	
Application Temperature (ambient and substrate/surface)	Minimum 15°C (60°F)	Maximum 35°C (95°F)
Properties at 23°C (73°F) and 50% R.		
Volume Solids	40% approx.	
Mixed Density	1.07 kg/L	
Pot Life/Working Time	1 hour approx.	
Touch Dry	2 hours approx.	
Anti-graffiti Properties	4 days	
Full Cure	7 days	
<i>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.</i>		



How to Use

Surface Preparation

All surfaces to be sealed must be clean, dry, sound and frost-free.

Where existing coatings are to remain, they must be well adhering, free from loose material, dirt dust and any accumulated pollutants.

Uncoated surfaces must be free from curing compound residues and any material or contaminants detrimental to penetration and adhesion.

Bug holes, cracks or irregularities in the substrate should be filled and levelled with SikaTop®, SikaRepair® or Sika® MonoTop® levelling mortars as appropriate. **Note:** The anti graffiti coating is clear and will not mask repairs to the substrate. To eliminate appearance of repairs, a coloured coating is required before application of Sikagard® AG (consult Sika Canada for recommendations).

Where necessary, surfaces should be prepared mechanically by blast cleaning or high pressure water-jetting. Allow adequate time for substrates/surfaces to dry before proceeding with application.

Mixing

Sikagard® AG is supplied in pre-proportioned components. Prior to mixing, pre-stir Component A (resin) to ensure that all solids are evenly distributed and a uniform consistency is achieved.

Using a low speed drill (300-400 rpm) and Sika® or *Jiffy* type mixing paddle, stir Component A (resin) in its container, creating a vortex. Slowly add Component B (hardener) while the mixing paddle is rotating, emptying all of the contents of its container into the vortex and mix for for at least 3 minutes until a uniform appearance (milky white liquid) and even consistency is produced. Avoid entrapment of air into mix, keeping the mixing paddle in the resin and keeping the rpm to the required level.

During the mixing operation, scrape down the sides and bottom of the mixing container with a flat tool or similar at least once to ensure complete mixing. Mix only that quantity which can be used within the product's pot life.

Note: Do not add Component B to Component A before the mixing paddle is in operation and a vortex exists. Doing so will result in improper mixing, uneven curing and reduced or nullified resistance to graffiti and its removal.

Application

Any areas of glass or other such sensitive surfaces should be masked to protect against contact with the finish.

Ensure that ambient and substrate (air and surface) temperatures are at least 15°C (60°F), to allow good film formation and proper cure, and that mist, dew or rainfall are not forecast for at least 24 hours within completion of application. Low temperatures together with the presence of moisture will result in the material not fully curing and a failure of the system.

Apply one coat Sikagard® AG by brush, roller (6 mm [1/4 in] nap) or spray (spraying provides more even and pore free coats and better penetration on porous substrates). Sikagard® AG is particularly suitable for application by spray using the correct equipment. Contact the spray equipment supplier for guidance as to what equipment will suit particular projects.

Apply the one coat in two passes, working 'wet on wet' with the second pass at 90 degrees to the first and at a coverage of approximately 6 - 7.5 m²/L (240 - 300 ft²/US gal.) to achieve 5 - 6 mils wet film thickness. This application technique serves to improve coverage of the surface and to produce a consistent and continuous film, which are essential to protecting surfaces against absorption of graffiti and being able to use cleaners to remove such.

At lower temperatures the drying time and full curing will be prolonged. At higher temperatures, work carefully to maintain a "wet" edge.

Allow the applied coating to cure for a minimum of 4 days at 23°C (77°F) before exposing to potential for graffiti. Protection or prevention of access may be required.



Note: As with all coatings, jobsite trials are recommended to establish compatibility with existing paints and coatings where they exist, appropriateness of method and quality of surface preparation, suitability of application equipment, acceptability of workmanship and agreed standard of finish.

Where Sikagard® AG is being considered for surfaces other than fair-faced, smooth concrete or similar, a trial area in a discrete but indicative location, should be coated to ensure that the removal of graffiti can be achieved to the desired degree.

Graffiti Removal Removal of graffiti is always best undertaken as soon as possible with best results achieved with cleaning taking place within 24 hours of graffiti being applied.

To remove graffiti, either spray or roller apply Sikagard® AG Cleaner gel onto the affected areas and leave to act for 1- 5 minutes as required, ensuring that the gel remains wet.

Note: Should environmental conditions cause the cleaning gel to dry, it must be reapplied and again kept wet for the required period.

Some graffiti paints can then be removed with clean water applied by a domestic hose with jet stream attachment. Do not use a pressure washer as this may damage the coating system.

Heavier or more persistent deposits of graffiti may require the use of a soft, nylon bristled brush or abrasive pad to scrub Sikagard® AG Cleaner into the affected area, before leaving for the required time to dissolve or emulsify the graffiti and then wash/wipe off.

Note: When using an abrasive pad, do not use steel wool or similarly aggressive materials which will damage the anti-graffiti coating and any underlying finishes. When wiping off, use a clean cloth and wipe in a single movement, working in one direction. Do not use a circular motion when wiping as this will simply redistribute the graffiti paint and not remove it.

Re-coating Procedure Following every removal of graffiti, examine the cleaned surface for any signs of change to the remaining film, including: reduction of gloss, abrasion of surface and loss of film.

Where any of the above signs of change to the anti-graffiti film are detected, a localised refresher coat is required.

Surface preparation required before the refresher coat must be established on a project specific basis. Nonetheless, it would typically incorporate light sanding or scuffing of the area to be refreshed if small and localised, or light sandblasting of attending to a larger area. The aim of the preparation is to remove any gloss and therefore remnants of the anti-graffiti film. The surface should then be simply cleaned by a clean water rinsing and then drying to remove any preparation residue and produce a clean and dry surface.

Note: In preparing the surface for a refresher coat, be careful not to damage the underlying substrate, be it original concrete, masonry etc or a paint/coating.

Clean Up Collect and contain spill with absorbent product. Discard in accordance with applicable regulations. Immediately clean tools and brushes with water. Hardened material can only be manually or mechanically removed. Wash soiled hands and skin thoroughly in hot soapy water or use Sika® Hand Cleaner towels.

- Limitations**
- Sikagard® AG is not designed for use as a vehicular traffic-bearing surface or for on-grade surfaces.
 - Minimum age of concrete prior to the application is 28 days, depending on curing and drying conditions (moisture content must be below 4%).
 - Minimum age of SikaTop®, SikaRepair® or Sika® MonoTop® mortars is 3 days prior to the application of Sikagard® AG (moisture content must be below 4%).
 - Allow sufficient time for the substrate to dry after rain or other inclement conditions.
 - Maximum humidity: 85% (measured with accurate and calibrated equipment).
 - Product must be protected from freezing. If frozen, discard. Do not store in direct sunlight for prolonged periods.
 - The material should not be applied at temperatures below those stated in Technical Data and it should be pre-conditioned to ensure application and performance characteristics are achieved.



- Ensure any existing coatings or treatments are thoroughly dry before over-coating to prevent formation of bubbles and blisters, particularly in warm weather.
- When over coating existing coatings, compatibility and adhesion testing is required.
- During application, regular monitoring of material consumption is advised to ensure that the correct film thickness is achieved.
- Sikagard® AG must be applied as a complete and consistent coating, as is necessary with any anti-graffiti system. Misses or low film thicknesses may result in graffiti not being able to be removed or a reduction in the number times the cleaning can be undertaken before the coating has to be replenished.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the **most recent Material Safety Data Sheet** containing physical, ecological, toxicological and other safety-related data Consult product label for additional information.

KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY

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, within their shelf life. 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 proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Product Data Sheet for the product concerned, copies of which will be supplied on request or can be accessed in the Internet under www.sika.ca.



Sika Canada Inc.
Head Office
601 Delmar Avenue
Pointe-Claire, Quebec
H9R 4A9

Other locations
Toronto
Edmonton
Vancouver

1-800-933-SIKA
www.sika.ca

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