

Technical data sheet

Perma-Guard Graffiti - Protection coating

GS-009-01 / -009-05 to 012-01 / -012-05

Issue date: 17.01.2014

Valid until:

Version: 1.1

Product information

Perma-Guard is a high-performance permanent Anti-Graffiti coating system as 2K-PU-coating (Polyurethane) on water basis. The graffiti protection coating provides a removal of graffiti over 100 times without renewing the protection coating and therefore offers a superior and permanent protection against graffiti. The material doesn't tarnish yellow, is UV resistant and is available in clear, white and in RAL and NCS hues as well as in gloss levels: glossy, satin finished, mat and ultra mat.

2. Application

Perma-Guard can be used on painted/lacquered surfaces, on porous and non-porous surfaces, plastic, metal, wood, concrete, cement, stone etc. If applicable, an adhesion primer – Guard-Primer [XT] might be necessary. Please see our data sheets regarding the surface specification prior to the application.

3. Characteristics

- 2-component polyurethane graffiti protection on water basis
- Excellent adhesion
- Suitable for many different surfaces (see surface specification)
- Useable for indoors and outdoors
- Perma-Guard is a registered Anti-Graffiti coating and RAL certified
- Provides permanent Anti-Graffiti protection
- As Anti-Graffiti-protection-System with system cleaner over 100 cleaning procedures possible

4. Technical data

Colors: Clear, white, RAL-hue, NCS-hue

Gloss level approx.: Slossy: >85 Gloss level at 60° angle

Satin finished: 45-50 Gloss level at 60° angle Mat: 15-20 Gloss level at 60° angle Ultra mat: <5 Gloss level at 60° angle

Density: approx.1.20-1,25 gr/cm³ (white)

Drying times: Dust dry after 2 hours

Recoat (2nd layer) after 4-6 hours Complete hardening after 7 days

Application rate: The consumption depends on the porosity of the surface

approx. 0,14-0,18 l/m² with 2 coats.

Mixture ratio: Component A (Coating): Component B (Hardener) = 2:1 on volume basis

Processing-/Pot life: approx. 45 minutes at 20°C

Dilution : For application by paint roll: Possible

For application by spray process: max. 5 % dilutable with de-mineralized

water.

Flashpoint : >100°C < 000 < 140 g/l

Application data

Application areas: Useable outside and inside (in well vented rooms).

Air and surface temperature has to be above 10° C during the application and drying process.

Vertrieb Deutschland

GUARD KG

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The surface has to be clean, dry, sustainable and fat free! Surface moisture has to be at max. 5 %! No application with rain or high humidity (> 85%) and / or temperatures above 35°C.

When ordering RAL/NCS hues, always check the color shade prior to the application.

Mixture

Combine component B (Hardener) with component A (Coating) and stir/mix with a flat spatula for a minimum of 2 minutes. Fill the mixed material in a clean container and use immediately. The mixture ratio is 2:1 (Coating:Hardener) on volume basis.

It is recommended to occasionally stir the mixed material during the application.

Application time (pot life) is approx. 45 minutes at 20°C. After either the time has elapsed or the viscosity has risen the material cannot be used anymore. Paint brush/roll should also be replaced after application time has elapsed.

Note: The clear material will be milky in fluid condition. It will become clear after the drying process.

ATTENTION!!! Mixed material not to be stored in closed containers!

Application with roller

When applying with roller/paint brush, a dilution with max. 5% de mineralized water could be done. Only add the de-mineralized water after mixing component B [Hardener] with component A [Coating]. Only use suitable rollers [e.g. short pile depth velour, 4-6 mm]!

NO USE of foamed rollers for the application! Do not re-use used rollers.

The Anti-Graffiti-Coating <u>has</u> to be applied in 2 layers in a cross-coat. The second layer only to be applied after the first layer is dry. Drying time at 25°C: 4-6 hours. In order to guarantee the functionality, the second layer has to be applied within 2 days after the drying process of the first layer!

Coating thickness with applications by roller

- 1. Layer: wet lamination strength of min. 50μ [Micron] = dry lamination strength min. 25μ [Micron]
- 2. Layer: wet lamination strength of min. 50µ [Micron] = dry lamination strength min. 25µ [Micron]
- <u>= Total lamination strength</u> = dry lamination strength min. 50 μ (Micron)

A measuring comb for coating thickness can be ordered at graffiti-quard.net!

Application with airless or HVLP process

With a spraying process a dilution with max. 5% de-mineralized water should be done. Only add the demineralized water after mixing component B [Hardener] with component A [Coating].

The Anti-Graffiti-coating is applied in a cross-coat, two [2] layers by wet-on-wet method.

Coating thickness with airless / HVLP application:

1. Layer: Wet-on-Wet method lamination strength of min.100 μ (Micron) = dry lamination strength min. 50 μ (Micron) = Total lamination strength min. 50 μ (Micron) = dry lamination strength min. 50 μ (Micron)

A measuring comb for coating thickness can be ordered at graffiti-guard.net!

Airless: 100-140 bar, Nozzle 0,011" (0,28mm) HVLP: 2,5-4 bar, Nozzle 0,011" (0,28mm)

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Note

3 layers should be applied with porous (strongly absorbent) and strongly textured surfaces. Alternatively, the first layer could be done with Guard-Primer [XT].

To avoid discoloration/shading of the surface, a primer should always be used with e.g. concrete, natural stone and old coats of paint.

We recommend to always check on a test area first with regard to adhesion, gloss level and color change prior to the application on big surfaces.

Please also note our surface specification!! Current versions are available at www.graffiti-guard.net.

The fresh coating should not be exposed to rain, steam and condensation (water) for 48 hours. Clean working tools with water. Do not re-use used rollers!

Graffiti removal

Graffiti will be removed with Remover G (Article GE-001-01 /-001-05 /-001-10), Remover G-PLUS (Article GE-002-01 /-002-05) or Shadow G (Article GE-005-01 /-005-05 /-005-10).

6. Packaging sizes

1 kg / 5 kg

7. Storage

In sealed and original packing stable for a minimum of 12 months. Store containers cool and dry and protect against frost.

8. Safety data

See safety data sheet

The information and data in this technical data sheet are based on our practical experience and knowledge. Due to different practice requirements a general liability is being excluded. Own trials with regard to the suitability and application by the user are to be done. With the release of a new technical data sheet, all former versions become void.