

Product Data

SIL-GUARD® WB

ANTI-GRAFFITI PROTECTIVE COATING



PIGMENTED

PRODUCT DESCRIPTION

SIL-GUARD® WB is a pigmented, permanent, single component anti-graffiti protective coating suitable for metal, concrete, brick, stone, wood, fiberglass, and pre-existing coatings. It can be applied directly to most existing graffiti, offering immediate protection against future graffiti. This room temperature vulcanizing silicone, combined with moisture-cure polysiloxane, ensures excellent durability and a long service life.

SIL-GUARD® WB forms chemical bonds directly with the host surface, enhancing adhesion without the need for abrasive blasting, priming, or extensive site preparation. Its hydrophobic nature facilitates easy removal of most graffiti with water at a lower pressure (1200 psi).

PRODUCT FEATURES

- Low VOCs
- Non-sacrificial coating
- Clear or custom colors
- Versatile application
- Durable waterproofing solution
- Easy graffiti removal
- One component silicone water-based elastomer
- Doesn't yellow, chalk or fade
- Long-term protection

PRODUCT SHELF LIFE

Product should be stored between 5°C and 35°C (41°F and 95°F). Protect material from freezing and securely fasten container lid. SIL-GUARD® WB has a 24 month shelf life when stored at recommended temperatures.

APPLICATION RATE AND COVERAGE

| | | |
|---------------|-----------------|----------------|
| DFT | 10 mils (254 µ) | 5 mils (127 µ) |
| sq. ft/US gal | 75 | 150 |
| sq. m/L | 7 | 14 |

SURFACE PREPARATION & APPLICATION

Surface Preparation:

Before application, ensure all surfaces are structurally sound, clean, and dry, free from oils, dirt, debris, or minerals such as efflorescence, lime, and calcium.

To achieve optimum cleanliness, wash surfaces with soap and water, rinse thoroughly, and allow them to dry completely especially crucial when applying over painted or stained surfaces.

Mixing:

Thoroughly mix the coating before application. Avoid aggressive agitation that may lead to excessive air generation or foaming.

Application:

Use airless spray equipment at a rate of approximately 75 square foot per gallon (10 mils DFT) with a 0.015 to 0.017 tip.

Apply in a cross-hatched pattern during spraying to ensure complete surface coverage. For rough or porous surfaces, a heavier application may be needed for comprehensive coverage.

Double Coat Application (for Maximum Protection):

For maximum graffiti protection, apply two coats at a rate of approximately 150 square foot per gallon (5 mils DFT) per coat. (See application rate and coverage chart)

Allow the coating to dry to the touch (2-3 hours) before applying the second coat.

Cleanup:

Clean application equipment with soap and water once finished.

Application Conditions:

Apply within a temperature range of 5°C - 38°C (40°F - 100°F). Maintain a relative humidity of 90% maximum.

Curing Time:

Graffiti resistance and weather protection fully develop after a cure time of 7-14 days.

Test Area:

Test the product on a small area to ensure the finish is satisfactory.

DRYING TIME

| | |
|-----------------------------|-------------|
| Skin-over Time | 25 minutes* |
| Tack-free Time | 60 minutes* |
| Cure Time for Effectiveness | 7-14 Days* |

*At standard conditions [40-100°F (5-38°C) and 90% relative humidity - 10 mils wet film thickness]

TECHNICAL DATA

| TEST NAME | TEST METHOD | RESULTS |
|--------------------------|-----------------|--|
| Appearance | | Thick Paint |
| Cure System | | Neutral, Moisture Cure |
| Sag | Leneta Sag Test | 20 minimum |
| Volatile Organic Content | EPA Method 24 | <25 g/L |
| Tensile Strength | ASTM D412 | 500 psi |
| Elongation at Break | | 500% |
| Water Vapor Permanence | ASTM E96 | 20 US Perm |
| Water Vapor Transmission | | 5.8g/(h*m ²) |
| Air Permanence | ASTM E2178 | <0.0002 cfm/ft ² |
| Temperature Stability | ASTM D412 | Continuous: -76 to 392 °F (-60 to 200°C) |
| Tensile Strength | | 500 psi |
| Elongation | | 500% |
| Accelerated Weathering | ASTM G154 | No blistering, chalking, gloss, or color changes: 10,000 hours |
| Viscosity | ASTM D2196 | 20,000 ± 1,000 cP |
| Durometer Hardness | ASTM D2240 | 50 points (Shore A) |
| Cleanability* | ASTM D7089 | 1 - Graffiti completely removed with high pressure cold-water wash |

*Cleanability Scale:

Cleanability 1 Graffiti completely removed with high-pressure cold water wash

Cleanability 2 Graffiti completely removed with commercial based graffiti remover and high-pressure cold water wash

Cleanability 3 Graffiti completely removed with high-pressure hot water wash

Cleanability 4 Graffiti completely removed with a sodium bicarbonate pressure wash

GRAFFITI REMOVAL - ASTM D6578

| Graffiti Marking Material | Graffiti Removal Rating (1-10)** | Cleaning Agent |
|---------------------------|----------------------------------|----------------------------------|
| Polyurethane spray paint | 8 | Cleanable with isopropyl alcohol |
| Acrylic spray paint | 8 | Cleanable with isopropyl alcohol |
| Alkyd spray paint | 8 | Cleanable with isopropyl alcohol |
| Ballpoint pen | 7 | Cleanable with MEK |
| Water-based marker | 9 | Cleanable with detergent |

**ASTM D6578 scale:

10 - Cleanable with a dry rag

9 - Cleanable with detergent

8 - Cleanable with isopropyl alcohol

7 - Cleanable with mineral spirits

6 - Cleanable with xylene

5 - Cleanable with MEK

4 - NOT cleanable, gloss loss

3 - NOT cleanable, slight shadow

2 - NOT cleanable, heavy shadow

1 - NOT cleanable, shadow and gloss loss

SAFETY PRECAUTIONS

SIL-GUARD® WB is recommended to be used by a professional applicator. In industrial situations review the product data sheet (PDS), safety data sheet (SDS), and the container instructions. When using SIL-GUARD® WB in a confined space use respirator equipment and/or a ventilation method. Before using this product, verify local and national safety regulations are still relevant. If you have questions please refer to you locations Health, Safety and Environment standards.

ADVANCED CHEMICAL TECHNOLOGIES, INC.

"Protecting the World's Infrastructure"

Technical Binder

