

# 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 (20 mils WFT) 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 (10 mils WFT) 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 <sup>2</sup> )
Air Permanence	ASTM E2178	<0.0002 cfm/ft <sup>2</sup>
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

