# **BARACADE SILANE 40**

SOLVENT-BASED SILANE WATER REPELLENT



## EUCLID CHEMICAL

## Description

**BARACADE SILANE 40** is a breathable, ready-to-use, colorless, non-staining, non-yellowing, deep penetrating concrete and masonry water repellent compound. It protects concrete, block, stone and brick against the damaging effects of water intrusion, deicing chemicals, freeze-thaw exposure and airborne contaminants such as acid rain, smog and industrial fumes. BARACADE SILANE 40 protects without altering the appearance or texture of the treated surface. BARACADE SILANE 40 produces a non filming water repellent surface while penetrating deep into the capillaries of the subsurface. Chemical reactions within the capillaries form long lasting water repellent groups that crosslink into a silicone compound.

## **PRIMARY APPLICATIONS**

- · Sidewalks & ramps
- · Exposed aggregate
- · Precast, prestressed & poured in place concrete
- Parking and bridge decks
- Industrial floors
- Lightweight & air entrained concrete

## Features/Benefits

- Reduces intrusion of water, deicing chemicals, and airborne contaminants
- · Penetrates deep into capillaries of treated surface
- · Improves freeze-thaw resistance
- · Will not alter texture or appearance of treated surface
- Will not etch glass

## **TECHNICAL INFORMATION**

#### Typical Engineering Data

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

| MATERIAL PROPERTIES                  |                         |
|--------------------------------------|-------------------------|
| SILANE CONTENT                       | 40%                     |
| VOC CONTENT                          | 579 g/L                 |
| Flash Point (minimum)                | 105°F (41°C)            |
| DENSITY                              | 6.9 lbs/gal (0.83 kg/L) |
| RESISTANCE TO UV                     | Excellent               |
| Average Depth of<br>Penetration      | 3/8" (9.5 mm)           |
| Dry Time (foot and wheel<br>traffic) | 2 to 4 hours            |

#### NCHRP REPORT 244, SERIES II REDUCTION IN WATER ABSORPTION

87.6%

NCHRP REPORT 244, SERIES II REDUCTION IN CHLORIDE ION CONTENT

85.3%

NCHRP Report 244, Series IV Accelerated Weathering (Southern Exposure)

No change

NCHRP REPORT 244, SERIES IV REDUCTION IN CHLORIDE ION CONTENT

97.6%

FREEZE THAW DURABILITY ASTM C666 93.5%

| Water Penetration Reduction (CMU)<br>ASTM E514 |  |
|--|--|
| 90.9%  |  |
|  |  |

| Scaling Resistance<br>ASTM C672 |                         |
|---------------------------------|-------------------------|
| 25 CYCLES                       | 0 - No scaling          |
| 50 CYCLES                       | 1 - Very slight scaling |

Accelerated Weathering @ 1,500 hours ASTM G154

Excellent

WATER VAPOR PERMEANCE ASTM D6490

5.93 perms

BARACADE SILANE 40 is packaged in 5 gal (18.9 L) pails and 55 gal (208 L) drums.

#### SHELF LIFE

2 years in original, unopened container

#### Specifications/Compliances

BARACADE SILANE 40 meets the performance standards of NCHRP 244 Complies with Federal AIM Rule VOC regulations

#### COVERAGE

#### Surface Type

Smooth Concrete Exposed Aggregate Bridge Decks/Ramps/Driveways Resealing Bridge Decks/Ramps

#### ft²/gal (m²/L) per coat

150 to 300 (3.68 to 7.36) 100 to 200 (2.45 to 4.91) 100 to 300 (2.45 to 7.36) 150 to 350 (3.68 to 8.59) Because of variations in surface density, the coverage rates are approximate and are intended for estimating purposes only. Use test applications on actual surfaces to accurately determine coverage rates. Extremely porous surfaces may require two coats of BARACADE SILANE 40.

## DIRECTIONS FOR USE

**Surface Preparation**: Cure new concrete a minimum of 3 days before application. Surface must be clean, dry and structurally sound. The substrate must also be free of all curing compounds, form release agents and any other contaminants which may prevent the proper penetration of BARACADE SILANE 40. Prior to application, joints or cracks in movement must be properly sealed with an elastomeric joint sealant. Surfaces must be dry for a minimum of 24 hours prior to application. Mask all adjacent surfaces including grass, plants, shrubs and asphalt to protect from drips or over spray. Mask or protect adjacent surfaces, including grass, plants, shrubs, metal, and asphalt from overspray or drips.

**Application**: BARACADE SILANE 40 should be applied using low pressure, non-atomizing, airless spray equipment. A solvent-resistant pump-up sprayer may be used for smaller projects only when an airless sprayer is not available. Do not use pressure pot or lacquer type paint sprayers. To produce the proper material flow, reduce air pressure on pumping equipment and use spray tips with orifice sizes no smaller than 0.035" (0.9 cm). Larger tips may be required with some spray equipment to get desired material flow. Flood the surface with BARACADE SILANE 40 using a low pressure sprayer, roller or broom. Distribute material evenly. After the surface absorbs the BARACADE SILANE 40, apply a second coat before the surface dries. Do not allow the material to puddle.

#### CLEAN-UP

Clean tools and equipment with mineral spirits or similar solvent immediately following use. Clean drips and over spray with mineral spirits while still wet. Clean glass and other non absorbent materials soon after application.

#### Precautions/Limitations

- Store at temperatures between 40°F to 90°F (4°C to 32°C).
- Do not dilute
- Do not allow to puddle. All product should penetrate the substrate with no surface build-up.
- Do not apply to a frost filled surface or when the temperature is below 40°F (4°C).
- Do not apply if rain is expected within 4 to 6 hours.
- Use in a well ventilated area. Avoid breathing vapors or mist.
- A small (6' x 6') test area is strongly recommended prior to starting full application, in order to ensure desired performance results, aesthetics, and coverage rates. Allow 5 to 7 days for product to fully react before evaluating.
- In all cases, consult the Safety Data Sheet before use.

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