PENETRATING SEALERS & LIQUID DENSIFIERS

Master Format #: 07 19 16

BARACADE SILANE 40

SOLVENT-BASED SILANE WATER REPELLENT



PACKAGING

5 gal (18.9 L) pail Code: TL19265 05 55 gal (208 L) drum Code: TL19265 55

APPROXIMATE COVERAGE

See coverage rate section below for application rates.

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.

SHELF LIFE

2 years in original, unopened package

SPECIFICATIONS AND COMPLIANCES

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

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.

PRODUCT CHARACTERISTICS

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
- Helps extend the life of structures, via reduction of water and chloride absorption

PRIMARY APPLICATIONS

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

COVERAGE

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.

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)

TECHNICAL INFORMATION

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 Penetration	3/8" (9.5 mm)	
Dry Time (Foot and Wheel Traffic)	2 to 4 hours	

Freeze Thaw Durability ASTM C666	
93.5%	

Water Penetration Reduction (CMU) ASTM E514	
90.9%	

Scaling Resistance ASTM C672		
25 Cycles	0 - No scaling	
50 Cycles	1 - Very slight scaling	

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%		

Accelerated Weathering @ 1,500 Hours ASTM G154 Excellent

Water Vapor Permeance ASTM D6490	
5.93 perms	

DIRECTIONS FOR USE

Surface Preparation: Cure new concrete a minimum of 7 days before application. The longer the concrete is allowed to cure, the better the sealer performance will be. 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.

PRECAUTIONS/LIMITATIONS

- Store at temperatures between 40 to 90 °F (4 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.
- Will not etch glass.
- 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.