



TECHNICAL DATA SHEET

VULKEM® 100% SILANE SEALER

Clear, Penetrating Silane Water Repellent

PRODUCT DESCRIPTION

Vulkem® 100% Silane Sealer is a clear, penetrating water-repellent sealer formulated with 100% silane. It provides excellent protection against water intrusion and chloride ion penetration while maintaining the natural appearance of concrete substrates.

BASIC USES

Vulkem 100% Silane Sealer is ideal for use on parking decks, balconies, bridges, precast panels, vertical and horizontal concrete, and other exposed surfaces where deep penetration and long-term water repellency are required.

COVERAGE RATE

250–400 ft²/gal (6.14–9.82 m²/L) per coat, depending on surface porosity and texture.

FEATURES & BENEFITS

- Excellent chloride and water repellency
- Deep substrate penetration
- Maintains the breathability of the substrate
- Compatible with elastomeric coating systems
- Long-lasting protection for exposed concrete

AVAILABILITY

Immediately available from your local Tremco Sales Representative, Tremco Distributor or Tremco Warehouse.

PACKAGING

Vulkem 100% Silane Sealer: 5-gal (18.9-L) pails, 50-gal (189.3-L) drums

INSTALLATION

Surface Preparation:

Cure new concrete for a minimum of 7 days before application. Longer cure times will enhance sealer performance. Surface must be dry, structurally sound, and free from form release agents, curing compounds, dirt, oil, dust, and other contaminants that inhibit penetration. The substrate must be an open capillary and absorbent. Before application, all joints and moving cracks must be sealed with an appropriate elastomeric joint sealant. Non-moving cracks or voids greater than 1/64 inch (0.4 mm) should be filled with a compatible patching material. Do not apply to damp or wet surfaces; allow at least 24 hours of drying time following rain or moisture exposure. Install sealant before applying sealer. Mask off and protect surrounding surfaces (e.g., vegetation, metal, asphalt) from drips or overspray.

Application:

Apply Vulkem 100% Silane Sealer using low-pressure, non-atomizing airless spray equipment with solvent-resistant hoses and gaskets. For smaller areas, a garden-type sprayer may be suitable. Brushes or rollers are not recommended for large surfaces due to the potential for inconsistent coverage. Apply a single, saturating coat to horizontal surfaces, ensuring full, even coverage. Use a broom or squeegee to distribute and remove excess material. If a second coat is required, apply it “wet-on-wet” before the first coat dries.

Typical traffic-ready time is 4 hours at 75°F (24 °C) and 50% relative humidity. Dry time will vary with ambient conditions — warmer and drier climates accelerate curing, while cooler or humid environments may extend it.

LIMITATIONS

- Store in a cool, dry place at temperatures below 90°F (32 °C).
- Vulkem 100% Silane Sealer is a combustible liquid. Keep away from heat, sparks, and open flames.
- Do not dilute.
- Do not allow material to puddle. The product must fully penetrate the substrate without forming a surface buildup.
- Do not apply to frost-filled surfaces or when ambient or surface temperature is below 20°F (-6 °C).
- Do not apply if rain is expected within 4 to 6 hours of application.
- Not intended for use on below-grade applications or applications where hydrostatic pressures exist
- May not be compatible with certain types of limestone or marble — test before use.
- Use only in well-ventilated areas.
- A small test area (6' x 6') is strongly recommended to confirm performance, aesthetics, and coverage. Allow 5 to 7 days for full reaction before evaluating.
- Consult the Safety Data Sheet (SDS) prior to use.

WARRANTY

A repair or replacement warranty is available on all Tremco products. Visit <https://www.tremcosealants.com/warranties/> for details.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL RESULTS
Silane Content	N/A	100%
VOC Content	EPA Method 24	331 g/L
Flash Point (Minimum)	Setaflash	154 °F (67.8 °C)
Density	ASTM D1475	7.6 lbs/gal (0.91 kg/L)
Depth of Penetration (avg.)	NCHRP 244	0.30 in. (7.6 mm)
Dry Time – Foot & Wheel Traffic	Visual	2 to 4 hours
Reduction in Water Absorption	NCHRP 244, Series II	93.00%
Reduction in Chloride Ion Content	NCHRP 244, Series II	93.70%
Accelerated Weathering – Southern Exposure	NCHRP 244, Series IV	No Change
Reduction in Chloride – Southern Exposure	NCHRP 244, Series IV	95.00%
Accelerated Weathering – Northern Exposure	NCHRP 244, Series IV	No Change
Reduction in Chloride – Northern Exposure	NCHRP 244, Series IV	91.00%
Water Penetration Reduction (CMU)	ASTM E514	91.40%
Absorption Reduction	ASTM C642	93.30%
Water Repellency	Fed Spec SS-W-110C	0.53% water absorption
Weathering	Fed Spec SS-W-110C	0.60% water absorption
Efflorescence Resistance	Fed Spec SS-W-110C	No visible efflorescence
Water Vapor Transmission	ASTM E96	96% (2% reduction vs. control)
Chloride Ion Penetration @ 1/16"-1/2"	AASHTO T259/T260	85.0% reduction (from 8.5 to 1.3 lb/yd ³)
Chloride Ion Penetration @ 1/2"-1"	AASHTO T259/T260	97.2% reduction (from 2.8 to 0.1 lb/yd ³)

Tremco Construction Products Group (CPG) brings together Tremco CPG Inc. and its Dryvit and Nudura brands; Willseal; Prebuck LLC; Tremco Barrier Solutions, Inc.; Weatherproofing Technologies, Inc. and its Pure Air Control Services and Canam Building Envelope Specialists offerings; and Weatherproofing Technologies Canada, Inc.



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Please refer to our website at www.tremcosealants.com for the most up-to-date Product Data Sheets.

NOTE: All Tremco Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

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