

1. PRODUCT NAME

Tenon®100% Silane Sealer

2. MANUFACTURER

TCC Materials®

2025 Centre Pointe Blvd.
Mendota Heights, MN 55120 USA

Phone: 1.651.688.9116
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3. PRODUCT DESCRIPTION

Tenon®100% Silane Sealer is a clear, solvent-based, concrete sealer that penetrates deep into, and reacts chemically, within the capillaries of the concrete or masonry in order to protect against moisture penetration and the spalling, freeze damage, and rebar corrosion which moisture can cause. It is suitable for use to protect and seal fully-cured new concrete, cast in place, precast, and high strength concrete materials. Silane sealer is used for above-grade exterior applications that are not subject to hydrostatic pressure. It is excellent for treating high traffic areas or surfaces that receive high salt concentrations such as coastal piers.

Features and Benefits

- Protects and seals
- High chloride ion resistance
- Early water repellency
- Dries tack free
- Natural-looking, invisible protection
- Non-staining, colorless, non-yellowing
- Ready to use
- High alkali resistance
- Breathable and deeply-penetrating
- Easy to apply with sprayer and roller
- Reduces formation of efflorescence
- VOC compatible in many states
- Protects from effects of rain and other water penetration, chemicals, salt, freeze-thaw, and smog

Uses

- Above-grade exterior applications
- Vertical or horizontal applications
- All concrete applications
- Fully cured, new or existing concrete applications
- Precast or tilt-up concrete
- High strength concrete
- Excellent for retaining walls, pavers, and brick

SAFETY

READ THE SAFETY DATA SHEET (SDS) BEFORE USING THIS

PRODUCT. SDS information is available on our website: tccmaterials.com or contact TCC Materials® at 651-688-9116 (7:30 AM to 4:00 PM Central US Time).

CAUTIONS

Read complete cautionary information printed on product container prior to use.

This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the covered Tenon® brand product (s) under normal environmental and working conditions. Because each project is different, neither Tenon® nor TCC Materials® can be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

4. TECHNICAL DATA

These dry times are dependent on normal drying conditions. Cool temperatures or high humidity will slow the drying time.

Packaging

- 1 gal. bottle (3.78 L) – Product #129890
- 5 gal. pail (18.93 L) – Product #129900
- 55 gal. drum (208 L) – Product #129652

Typical Results of Tenon®100% Silane Sealer	
Composition and Materials	Butyl Triethoxy Silane. Tenon® products are manufactured with only the finest quality raw materials available and close quality control is practiced.
Density	7.3 lbs./gallon
Flash Point	>100°F (> 37°C)
Typical Drying Time @ 70°F	1–2 hour (touch) 2–4 hours (traffic)
VOC Content*	<400 g/L
A.I.M. Category	Waterproofing Sealers and Treatments Maximum VOC 600 g/L
Applicable Standards	ASTM C 672 Scaling Resistance of Concrete Surfaces Exposed to Deicing Chemicals NCHRP 244 (water absorption, % water vapor transmission, and % reduction in chloride intrusion) Alberta DOT Penetrating Sealer Type 1B and Type 1C

Shelf Life

For best use, the recommended shelf life is 18 months. If shelf life is beyond 18 months, please contact your distributor. Store in original labeled container, away from moisture, and out of direct sunlight. **DO NOT STORE NEAR HEAT OR OPEN FLAME.** Keep containers tightly sealed when not in use.

5. INSTALLATION

Preparation

- Read all directions before starting work. Read and understand SDS pages for safety precautions prior to use.
- Remove all loose or unsound materials prior to application. Thoroughly clean surface of dirt, dust, oil, grease, paint, curing compounds, or other contaminants before using.
- Apply only to dry surfaces for optimal performance. Do not apply when rain is expected within 4–6 hours of application.
- If rain has preceded the application, the surface should be allowed to dry for at least 24 hours.
- Check compatibility with the substrate manufacturer prior to placement.
- Keep containers tightly sealed when not in use, and use only in well-ventilated areas.
- All pressure wash substrates must dry for a minimum of 7 days prior to sealer application
- Allow 6–12 hours cure time of all sealant materials before application of sealer.

New Concrete: Water-cure new concrete or use a water-based dissipating curing compound. All fresh concrete should be properly cured (28 days).

Existing Concrete: Repair any cracks or damaged areas first and allow repair to cure fully before applying Tenon®100% Silane Sealer. Mechanical abrasion of smooth-finished surfaces may be needed for maximum penetration.

Note: It is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use.

Job Mockups

The manufacturer requires that when its Tenon® products are used in any application or as part of any system that includes other manufacturers' products, the contractor and/or design professional shall test all the system components collectively for compatibility, performance and long term intended use in accordance with pertinent and accepted industry standards prior to any construction. Written documentation of the tests performed shall be satisfactory to the design professional and contractor. Test results must include the means and methods of application, products used, project-specific conditions being addressed, and standardized tests performed for each proposed system or variation.

Mixing

- No mixing required, ready to use.
- Do not dilute.

Application

1. Apply only when air and substrate temperatures are above 40°F (4°C) and the product is above 50°F (10°C). For best results, surfaces must be clean and dry.
2. Apply with low-pressure sprayer and back-roll or apply with roller. When using a sprayer, it should be equipped with PVC, viton, or other compatible fittings and hoses as solvents can damage rubber.
3. Apply evenly and sufficiently to wet, vertical surfaces with a minimum 2 in. (51 mm) run-down, starting at the bottom and working up.
4. It is important to roll the surface in order to evenly spread the sealer. Surface should have a uniform, wet look until the sealer dries.
5. Roll out any pools that accumulate on the surface after 5 minutes.
6. If any dry areas form before 5 minutes, apply an additional light coat to those dry areas.
7. When applying to split-face block, be sure the block is dry to allow for quality penetration with no run-down. If applied to damp block, 100% Silane Sealer may react with the water on the surface which may prevent it from achieving a natural look.

Note: Tenon®100% Silane Sealer will not darken the appearance of concrete. A small mock-up in an inconspicuous area is often done to test compatibility with the substrate prior to full application. When applying to existing areas, surfaces must be clean and dry.

Cleaning

Use mineral spirits or solvent-based cleaners, such as xylene, on tools and equipment. For sprayers, pump the solvent through the spray equipment to remove residue and prevent clogs. For skin contact, wash thoroughly with soap and warm water.

Limitations

- Not for use on gypsum surfaces.
- Sprayers must be equipped with PVC, viton, hoses, or other compatible fittings as rubber or other materials could disintegrate.
- Some fumes may be present during application. Use best practices when applying on interiors for proper ventilation. Silane is non-toxic in its cured state.
- Dispose of contents/container in accordance with all local and state regulations.
- Keep out of reach of children.

Coverage

Note: The recommended coverage rate for most concrete substrates is 125 sq. ft. per gal. Coverage may vary due to porosity, wind, temperatures, and condition of surfaces. For more detailed coverage rates, refer to the chart below.

6. AVAILABILITY

To locate Tenon® products in your area, please contact:

Phone: 1.651.688.9116

Email: info@tccmaterials.com

7. WARRANTY

Seller warrants that its product will conform to and perform in accordance with the product specifications. The foregoing warranty is in lieu of all other warranties, expressed or implied, including, but not limited to those concerning merchantability and fitness for a particular purpose. Because of the difficulty in ascertaining and measuring damages hereunder, it is agreed that Seller's liability to the Buyer shall not exceed the total amount billed and billable to the Buyer for the product hereunder.

8. MAINTENANCE

Approximate Coverage @ 70°F (21°C)	Sq. Ft./Gal.	M ² /L
Bridge decks / ramps	100–200	2.4–4.9
Smooth concrete	150–250	3.7–6.1
Exposed aggregate	100–200	2.4–4.9
Concrete block	40–100	0.9–2.4

Normal sweeping, dusting, or mopping. If spillage removes the coating or if traffic wear patterns occur, 100% Silane Sealer can be reapplied to the affected area.

9. TECHNICAL SERVICES

Technical Assistance:

Information is available by calling TCC Materials®
(hours 7:30 AM to 4:00 PM CST):

Phone: 1.651.688.9116

Email: info@tccmaterials.com

Web: tccmaterials.com

Technical and Safety Literature:

To acquire technical and safety literature, please visit our website at: tccmaterials.com.

10. FILING SYSTEM

Division 9



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