



ISO 9001 CERTIFIED

TK-TRI-SILANE 590-100

Deep Penetrating Water Repellent

Item No. TK-590-100

PRODUCT DESCRIPTION

TK-590-100 is a clear, one-component, high performance, deep penetrating 100% silane water repellent for concrete and masonry. Through the process of hydrolysis, TK-590-100 chemically bonds with the surface to form a protective barrier that is far superior to traditional penetrating water repellents.

Features:

- Forms a chemical, and permanent, bond with the substrate to provide ultimate protection against damage due to water and deicing chemical intrusion, acid rain, freeze/thaw exposure, airborne dirt, smog, industrial fumes and most other atmospheric chemicals.
- Reduces staining due to motor oils, greases and food.
- Deep penetrating to eliminate surface moisture which can lead to spalling, freeze damage and rebar corrosion.
- Outperforms typical water repellents which can only bond physically with the surface and thus provide marginal protection.
- The coating is colorless, non-staining and non-yellowing.

USES:

Suitable for vertical or horizontal use on new or existing above-grade surfaces. Use to protect any concrete, burnish block, brick, CMU, single wythe, masonry or cementitious surface. Ideal applications include parking garages and structures, ramps and barriers and showroom, food court, warehousing and stadium flooring.

APPLICATION PROCEDURES:

PREPARATION:

Before using this product, read the Safety Data Sheet for complete safety information.

All surfaces to be treated must be clean and structurally sound. Thoroughly clean surfaces to remove all grease, oils, form oils or other contaminants using waterblast, sandblast or shotblast methods. Best results are obtained by applying TK-590-100 to dry surfaces. It is recommended that surface temperatures be 35°F or above at the time of application to ensure that surfaces are frost-free.

Existing Concrete preparation - Unsound concrete should be removed and cracks or deteriorated areas repaired prior to application. Surfaces may need to be mechanically abraded to achieve maximum penetration.

New Concrete preparation - Water cure fresh concrete. As a standard procedure, allow new concrete to thoroughly cure (usually between 14-28 days) following placement before applying this product.

A test patch should always be performed to determine proper results and coverage rates prior to application.

TECHNICAL DATA

% Actives:	100%
Flash Point:	125°F
VOC Content:	< 400 g/l
A.I.M. Category:	Waterproofing Sealers and Treatments

APPLICABLE STANDARDS

- ASTM 672-76: Freeze/Thaw Cycle
- ASTM 642-75: Water Absorption
- AASHTO T-260-78: Chloride Penetration
- NCHRP #244, Series II & IV: Chloride Ion Intrusion

TYPICAL PROPERTIES

TK-590-100 is characterized by the following properties:

- Excellent penetration
- High alkali resistance and suitability for either alkaline or neutral substrates
- Provides resistance against traffic abrasion
- Low volatility
- Dries tack free
- Provides early water repellency while allowing interior moisture to escape without damaging the sealer
- Exhibits droplet effect
- Will not etch glass

MIXING:

The material is ready for use and requires no mixing or dilution. It is unlawful to further dilute with non-exempt solvents.

APPLICATION:

Apply by roller, brush or low pressure industrial sprayer.

Industrial Sprayer Equipment:

- 20 psi pump with a ½ gallon to 1 gallon per minute rate.
- 100-10 tip

Ensure complete coverage and saturation by maintaining surface moisture briefly.

Any puddles should be broomed out. When applying to vertical surfaces, apply a light spray to break the surface tension of the wall and follow immediately with a flood coat. Apply horizontally with plenty of overlap and enough material to fully saturate the surface and all mortar joints.

DRYING TIME:

Drying times will vary depending on application rate, and substrate porosity, ambient and/or substrate temperature, humidity, sunlight and project conditions. Restrict foot and vehicular traffic until the surface appears dry and does not track. At 400 square feet per gallon @ 77°F, you can expect dry times to drive and walk on between one-half hour to one hour. Over application will extend dry times.

CLEAN UP:

Clean tools, equipment and spills with TK-00 XYLENE*.

COVERAGE:

The recommended coverage rate for most concrete substrates is 250-400 square feet per gallon. Very porous surfaces may require two coats.

Coverage rates are provided as a guideline only. Many factors including surface texture, porosity and weather conditions will determine actual coverage rates.

MAINTENANCE:

If wear patterns occur, TK-TRI-SILANE 590-100 may be reapplied to affected areas.

LIMITATIONS:

- Do not use below-grade or under hydrostatic pressure.
- Do not apply if wet or inclement weather are anticipated within 4 hours of application.
- Only apply to structurally sound surfaces as this product will not prevent water penetration fully when applied to cracked or unsound surfaces.
- Cover adjacent surfaces with a drop cloth or tarp to prevent damage.
- The typical usable temperature range of this product is 20°F-90°F.
- Use with adequate ventilation.
- Not suitable for use on gypsum.

FIRST AID:

- Consult this product's safety data sheet for additional health and safety information. Safety Data Sheets are available through TK distributors, the TK office and the TK website.

AVAILABILITY:

TK-TRI-SILANE 590-100 is available through TK Distributors. Contact TK Products for the nearest distributor.

Packaged in 240-gallon totes, 55-gallon drums, 5-gallon pails and 1-gallon cans.

FOR PROFESSIONAL USE ONLY

NOTES:

*TK-00 XYLENE must be purchased separately

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CONDITIONS OF SALE/ LIMITED WARRANTY

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**TK Products Construction Coatings**

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