# **TEK FIVE™**

## MODIFIED SILANE FLOORING ADHESIVE

# TEKNOFLOR®

## **PRODUCT DATA SHEET**

REVISED FEBRUARY 2024 Page 1 of 2 Disclaimer: It is the user's responsibility to review and determine the suitability of this information and product for their intended purpose. The manufacturer is not responsible for the misuse of this product. This Product Data Sheet and the information conveyed herein supersede all previous versions.

#### TEK FIVE™ MODIFIED SILANE FLOORING ADHESIVE

Specially formulated for use with Teknoflor® and Tuf Stuf heterogeneous sheet vinyl, tile, and plank (except for PVC-Free or homogeneous sheet) flooring products. TEK FIVE™ is an advanced Modified Silane based adhesive featuring high aggressive peel and shear strength. This zero-VOC, solvent-free, nonflammable, easy-troweling product provides excellent installations when used with recommended Teknoflor® flooring products over both porous and non-porous surfaces. TEK FIVE™ has low odor, develops tack and is very easy to use. It demonstrates excellent water, alkali, and plasticizer migration resistance and may be used with confidence over a variety of flooring materials.

#### **SUITABLE SUBSTRATES**

Properly prepared double-layer wood substrates with a minimum of 1-inch total thickness using APA or other suitable ¼ inch or thicker underlayment grade plywood, terrazzo, ceramic, existing well adhered non-cushion vinyl tile and vinyl sheet goods, radiant heated substrates where surface temperatures do not exceed 85°F (29°C), as well as above-grade, on-grade, and below-grade concrete. All substrates must be compliant with the most current version of ASTM F710 and ASTM F1482.

#### TEK FIVE is not for use:

- Over substrates with hydrostatic pressure.
- Over substrates with visible surface moisture.

- With Teknoflor PVC-Free sheet
- · With Teknoflor homogeneous sheet

#### SUBSTRATE MOISTURE LIMITS

CONCRETE: 90.0% RH (ASTM F-2170) and or 8.0 lbs. MVER (Moisture Vapor Emissions Rate) (ASTM F-1869).

WOOD: Wood substrate moisture content should read less than 14% when checked with a reputable pin or pinless moisture meter with

material specific settings. Underlayment panels should be properly stored within the project space. Prior to installation, the wood

panels shall be fully acclimated to occupancy-conditions and have reached equilibrium moisture content (EMC).

### SUBSTRATE PREPARATION

Always perform a bond test prior to installation. All substrates must be structurally sound, well fastened, free of excess deflection, clean, flat, smooth, dry, and free of any deleterious contaminants that may stain the flooring or interfere with a proper bond. Concrete must be fully cured, meet specified moisture limits, and shall be free of curing compounds, sealers, adhesive abatement chemicals, and any other additives or treatments that may reduce bond. Use a high quality suitable 3,500 psi portland cement or calcium aluminate preparation material in accordance with the manufacturers' instructions. Follow the current product instructions for preparation and installation over specific substrates. It is the responsibility of the installer/contractor to ensure the substrate is suitable and is properly prepared prior to installation.

## SURFACE POROSITY (ABSORBANCY)

Always test the substrate for absorbency. Determining the surface porosity may be established by placing a ¼ inch size drop of potable water onto a properly cleaned substrate using a dropper or pipette from a height no greater than ½ inch. If the droplet of water is absorbed within 1 minute the surface in likely considered porous/absorbent. If the drop of water is still beaded after 1 minute, the surface is likely considered non-porous/non-absorbent. Testing must be done in compliance with the most current version of ASTM F3191.

#### ΔΡΡΙ ΙΟΔΤΙΟΝ

Confirm the structure's HVAC system is adequate and fully operational. The flooring material, ancillary products, project-area, and the substrate must be acclimated for as long as necessary to reach occupancy/service conditions. The area must be between 65°F to 85°F (18°C to 29°C) at a relative humidity of 35% to 65% RH before, during, and after installation. Low relative humidity requires longer time to flash and increases working time. Higher relative humidity requires less time to flash and shortens working time. Use a humidifier to increase very low relative humidity levels to a suitable range. Always follow the Teknoflor Installation Guidelines.

### **POROUS SUBSTRATES (Absorbent)**

WET SET: Apply adhesive with the appropriate trowel and allow to flash off for 0-10 minutes before installing flooring. Lay tile, plank, or sheet goods into wet adhesive according to flooring manufacturer's instructions to achieve 100% adhesive transfer to the back of the flooring. Wet-set installation achieves the strongest bond strength and is the preferred installation method.

SEMI-WET SET: Apply adhesive with the appropriate trowel and let adhesive flash off for approximately 10-20 minutes. The adhesive will still have full transfer to your finger with some leg formation when lightly touched. Install flooring according to flooring manufacturer's instructions within 20-40 minutes. Ensure complete coverage of adhesive to the back of the floor at all times during installation.

## **NON-POROUS SUBSTRATES (Non-absorbent)**

A relative humidity of at least 50% is required on non-absorbent substrates. Allow the adhesive to flash off for approximately 20 minutes depending on climatic conditions, until the adhesive still transfers to finger and starts to form legs. Ensure complete coverage of adhesive to the back of the floor at all times during installation.

ROLLING THE FLOOR: Roll the flooring cross-directionally immediately after placement into the adhesive using a 100 lb. three section roller and hand roll the perimeter and seams. Ensure complete contact between adhesive and flooring and that all trowel ridges are completely flattened. Re-roll the floor after 1-hour.

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Type of Installation	Trowel Size* and Notch	Coverage
TILE / PLANK / SHEET POROUS & NON-POROUS	1/16" x 1/32" x 1/32" U-Notch 1.6mm x 0.8mm x 0.8mm Gundlach − FFA	Up to 260 sq. ft./gallon

<sup>\*</sup>Trowel dimensions are notch width x notch depth x notch spacing. Coverage is approximate and may vary depending on porosity of substrate, surface smoothness and the angle at which the trowel is held.

## MAKE CERTAIN THE TROWEL APPLICATOR IS NEW, UNWORN, AND APPLYING THE PROPER AMOUNT OF ADHESIVE.

### **CURING TIME AFTER INSTALLATION**

Light foot traffic after 12 hours and full traffic after 24-48 hours depending on conditions. Premature traffic can cause indentations, gapping and movement and other installation issues.

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Always wait a minimum of 12 hours before light foot traffic or covering the flooring. Full traffic may occur after a minimum of 24-48 hours. Premature traffic can cause indentations, gapping, movement, and other installation issues.

### **PHYSICAL PROPERTIES**

Base: Modified Silane polymer

Appearance: Smooth, creamy, easy to trowel. White to off-white in color.

Flash Time: Approximately 5-20 minutes

Working Time: Approximately 20-40 minutes at the recommended temperature and humidity.

Total Open Time: Up to 60 minutes depending on climate conditions. Shelf Life: One year in unopened container at 70° F (21° C).

VOC Content: 0 g/l when tested in accordance with SCAQMD Rule 1168.

Clean up: WET – Use alcohol wipe or clean cloth dampened with mineral spirits or denatured alcohol

DRY - Carefully remove with plastic putty knife or rub off with finger

Freeze-Thaw: Not sensitive to cold but should be maintained above 40° F (5° C). Freeze-thaw stable.

LEED: May contribute to LEED points under EQ 4.1.

Container Size: 3 Gallons Weight: 35 lbs.

Place of manufacture: European Union

Other features: Waterproof when cured, VOC compliant, non-flammable. Made without anti-microbial agents as the adhesive does not

promote fungal growth.

CAUTION: DO NOT take internally. If swallowed, DO NOT induce vomiting. Call a physician immediately. KEEP OUT OF REACH OF CHILDREN.

**WARRANTY INFORMATION:** This product is manufactured according to exacting quality control standards and is warranted to be free from manufacturing defects. Defective material called to our attention within one year of manufacture will be replaced. No guarantee, expressed or implied, is made regarding the performance of this product since the manner and conditions of application are beyond our control.

**FIRST AID:** Symptoms of poisoning may even occur after several hours; therefore, medical observation for at least 48 hours after the accident. If swallowed, do not induce vomiting. Immediately call for medical help. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If breathing is difficult, give oxygen. For eye contact, immediately remove contact lens and rinse with eyes wide open with plenty of water for several minutes. In case of skin contact, immediately wash skin with soap and plenty of water and rinse thoroughly. If possible, also wash with polyethylene glycol 400 and rinse thoroughly. Do not use solvents or thinners. Remove contaminated clothing or shoes. Seek medical help if irritation occurs. Wash clothing before reuse.

24 HR EMERGENCY CONTACT: CHEMTREC 800.424.9300 CONTACT ID: CCN794556

**FIRE FIGHTING:** In case of fire, use alcohol foam, dry chemical, carbon dioxide, or water spray. Use self-contained breathing apparatus and full protective clothing.