

TEK FIVE™

MODIFIED SILANE FLOORING ADHESIVE

PRODUCT DATA SHEET

Rev: March 2019

TEK FIVE™ - MODIFIED SILANE ADHESIVE

Specially formulated for use with all Teknoflor flooring products including Teknoflor®, TUF STUF™, CS Collection™ and LT Plank. 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 for all Teknoflor flooring products including Bio-Polyurethane, Vinyl and Ionomer based (Chlorine-Free) products including tile, plank and sheet in either homogeneous or heterogeneous construction over both porous and non-porous surfaces. TEK Five™ has low odor, develops tack and is very easy to use. It demonstrates excellent water and alkali resistance and may be used with confidence over a variety of flooring materials. Plasticizer migration resistance allows installation of a broad variety of floor products.

SUITABLE SUBSTRATES

Properly prepared double layer wood subfloors with a minimum 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 subfloors where surface temperatures do not exceed 85° F (29° C); and above, on, or below grade concrete in the absence of hydrostatic pressure or excessive moisture.

SUBFLOOR MOISTURE LIMITS

CONCRETE: **90.0% RH** (ASTM F-2170) and or **8.0 lbs. MVER** (Moisture Vapor Emissions Rate) (ASTM F-1869).
With TEK Max™: **99.0% RH** and/or **18 lbs. MVER - 2 coats**

WOOD: Readings between the subfloor / structural wood and underlayment panels must be within 2% and be less than 14% moisture content. Wood substrates must be checked with a calibrated pin moisture meter. If test results exceed limits, contact technical services at technicaldept@teknoflor.com for further assistance.

SUBSTRATE PREPARATION

All substrates must be sound, clean, flat and smooth, dry and free of dust, dirt, wax, grease and oil, marker and paint, and any other deleterious contaminants that may stain the flooring or interfere with a good bond (ASTM F710). Concrete must be fully cured and free of hydrostatic pressure or excessive moisture or out of spec surface conditions and shall be free of incompatible curing compounds or sealers, fire retardant chemicals, release agents and other concrete treatments or additives that may prevent a good bond. Level or grind flush high spots and fill low spots, crack or depressions. Use a high quality 3,500 psi cement or calcium aluminate smoothing and patching underlayment according to the instruction of the underlayment manufacturer. Do not fill expansion joints or other moving joints. Always perform a bond test prior to installation. Follow the current installation guidelines for preparation of and installation over specific substrates. It is the sole responsibility of the installer/contractor to ensure the substrate is suitable and is properly prepared prior to installation.

INSTALLATION

The installation site must be acclimated with HVAC in operation for a minimum of 3 days and preferably 2-3 weeks before starting. The adhesive, floor covering and subfloor surface to receive flooring must be acclimated to within 3° F of each other between 65° to 85° F (18° to 29° C) at a relative humidity of 35% to 65% 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. Follow the Teknoflor installation guidelines for detailed instructions.

SURFACE POROSITY (ABSORBANCY)

Determine the surface porosity by placing ¼ inch size drops of clean water on the surface of the floor using an eye dropper or straw. If the drops of water are completely absorbed into the surface within 1 minute the surface is considered to be Porous or absorbent. If the drop of water is still beaded up after 1 minute, the surface is considered to be non-Porous or non-absorbent.

Absorbent Surfaces: TEK Five™ may be used either wet or tacky-set over porous surfaces. To 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 a 100% adhesive transfer to the back of the flooring. Wet set installations achieve the strongest bond strength. To tacky-set, 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.

TEK FIVE™

MODIFIED SILANE FLOORING ADHESIVE

PRODUCT DATA SHEET

Rev: March 2019

Non-Absorbent Surfaces: A relative humidity of at least 50% is required on non-absorbent floors. 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.

Immediately roll the flooring with a 100 lb. three section roller in both directions and hand roll the perimeter and seams. Ensure complete contact between adhesive and flooring and that all trowel ridges are completely flattened. Reroll after 1 hour.

RECOMMENDED TROWELS AND COVERAGE RATE

Type of Installation	Trowel Size* and Notch	Coverage
Tile / Plank / Sheet Absorbent & Non-Absorbent Surface	1/16" x 1/32" x 1/32" U 1.6mm x 0.8mm x 0.8mm U	Up to 260 sq. ft./gallon

*Trowel dimensions are width x depth x spacing. Coverage is approximate and may vary depending on porosity of substrate, surface smoothness and the angle at which the trowel is held. *IT IS THE INSTALLERS RESPONSIBILITY TO APPLY THE PROPER AMOUNT OF ADHESIVE FOR THE JOB CONDITION.*

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.

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:	Water proof 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. EMERGENCY CONTACT NUMBER: CHEMTREC 800.424.9300 CCN794556

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.