



# MVS

**Moisture Vapour Suppressant.**



## OVERVIEW

Tekcem Moisture Vapour Suppressant (MVS) is a single component, two-coat rapid drying moisture suppressant priming membrane. It has a water-based, solvent-free formulation and was designed to control residual construction moisture – up to 95% relative humidity in cementitious subfloors (when tested with a correctly calibrated surface hygrometer in accordance with BS 8203). Therefore, floor coverings can be installed sooner. The orange pigmentation of the product enables identification and coverage control in areas of application.

## BENEFITS

- Water based, solvent free formulation.
- Up to 95% RH protection
- Dual purpose - Removes the need to prime.
- Available in convenient pack size for domestic and commercial applications (5kg and 25kg)
- Ready Mixed – Ready to apply
- Enhances build program - Enables earlier installation of floor finishes
- Bright Colour – For easy Identification
- Fast Application

## USES

This product is engineered for application on diverse substrates such as concrete floors, sand/cement screeds, and other absorbent construction materials. The material exhibits limited compatibility with highly compact substrates. In case of usage of the product with underfloor heating, kindly get in touch with Tekcem Technical Services for additional information.

Tekcem Moisture Vapour Suppressant (MVS) is not recommended in projects where hydrostatic pressure is a factor. In instances where moisture protection is necessary, the recommended approach is to utilise pressure relief drainage and/or external tanking systems as the primary means of safeguarding against moisture.

## SUBFLOOR PREPARATION

All substrates must be prepared to leave a sound, clean and surface dry subfloor. It is imperative to eliminate oils, grease, and other substances that could potentially impede adhesion. This includes the usage of release or curing agents during concrete curing processes, as well as the presence of laitance, impurities, and any substandard surface substrates.

In compliance with BS 8204-6 Part 7.2, the substrate's surface strength must exceed 1.5N/mm<sup>2</sup>. It is required for all bases to include a structural damp proof course or construction membrane. prior to applying Tekcem Moisture Vapour Suppressant (MVS), any rough, uneven, or damaged concrete or sand/cement screeds must be smoothed or repaired.

## JOINTS IN SUBFLOORS

It is necessary to determine the type of joints that are present in the subfloor. If the joints are supposed to enable movement around the perimeters and between the bays of the subfloor, then the Tekcem Moisture Vapour Suppressant (MVS) shouldn't be applied on top of them. Provided the joints are thought to be stable, then they can be infilled with Tekcem SF Membrane that has been bulked up with clean sharp sand to provide a viscosity that is resistant to slumping. In a similar fashion, infilling hollows and hairline cracks can be performed in the same way.

## PRIMING

No priming required.

## APPLICATION

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During the whole application and curing process, the temperature of the air should be at least 10 °c. The temperature of the floor should be at least 5°c higher than the dew point to guarantee that there is no moisture present at the surface of the subfloor, which would prevent adhesion. Temperature and humidity in the air both have a role in determining dew point. This feature is included in many modern electronic moisture testing kits. Before it is used, the product is required to be kept at temperatures ranging from 5°c to 30°c. This ensures that the product will have the optimal pot life and will be at a viscosity that is adequate for mixing. Do not add water or dilute Tekcem Moisture Vapour Suppressant (MVS), it is ready to use as is. Shake the bottle just before use to mix the contents.

Make sure that you do not use this product when the temperature is lower than 10 °c and/or the temperature of the substrate is lower than 5°c. Apply the first coat using an appropriate pre-coated roller (preferably a lamb's wool roller), rolling it on in one direction at a coverage rate of 0.15kg/m<sup>2</sup>, and making sure that the material is worked in thoroughly into the substrate. When the first coat is dry, after roughly 20 to 30 minutes at 20°c, apply the second coat in a direction perpendicular to the first coat at a coverage rate of 0.15kg/m<sup>2</sup>. Please let the coat dry for roughly 30 to 60 minutes at 20°c.

When the membrane is placed on absorbent surfaces, it has the potential to be absorbed into the substrate, leaving behind a shine that is more muted. In such cases, as well as those in which pinholes, cavities, or other areas of weakness are present, an additional coat might prove necessary.

As a two-coat application, you must mark out the appropriate area in accordance with the coverage rate to maintain a coverage rate of 0.15kg/m<sup>2</sup> per coat and to ensure that the coating is pinhole free when it is dry. In addition, to achieve and maintain this coverage rate, it is vital that the coating be completely free of pinholes. It is necessary to apply Tekcem Moisture Vapour Suppressant (MVS) within 12 hours of the membrane reaching its final state of cure to create an absorbent surface for the appropriate application of adhesives. If the membrane is not covered after 12 hours of the curing process, a further coat will be necessary. After the additional coat has dried, you may move on to applying the underlayment.

## SUBSTRATES

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The Tekcem Moisture Vapour Suppressant (MVS) may be used on most subfloors that are composed of cement. Tekcem recommends consulting with the manufacturers of the subfloor preparation equipment to guarantee that the appropriate equipment is chosen for the substrates.

**Concrete & Power Floated Concrete:** Abrading the surface mechanically to remove any surface hardeners or additives as required for power floated concrete. Ensure suitable dust prevention measures are used.

**Cementitious Screeds:** Perform a light abrasion to remove any contaminants that may have been left behind by other trades and to eliminate any upper surface materials which are weak and friable. Ensure suitable dust prevention measures are used.

## CURING AND DRYING PROCESSES

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The curing and drying times are dependent on good site conditions, specifically an air temperature of 20°c and adequate ventilation. Allocate a time frame of 20-30 minutes for the application of the first coat and around 30-60 minutes for the second coat. Locations with low temperature, high humidity, or excessive moisture, or with inadequate ventilation, will result in extended periods for drying and curing. Therefore, appropriate adjustments should be made. Ensure that the subfloor remains free from any other trades or foot traffic until it is fully cured. The product will likely go through a curing process that results in the formation of a glossy film with a colour that is orange. Conduct an inspection to verify the production of a film that is free from pinholes.

## PRODUCT CONSUMPTION

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The coverage provided is solely for informational purposes and assumes a level, no absorbent subfloor. Variations in consumption can be influenced by the texture and absorbency of the substrate. It is expected that a coverage rate of 0.15kg/m<sup>2</sup> per coat is achievable. To attain the appropriate coverage rate, it is advisable to determine the area beforehand and subsequently apply a uniform volume to the area. It is recommended that you mark the coverage area of each unit in large application areas, such as 16.7m<sup>2</sup>.

## CLEANING

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Any tools and equipment can be cleaned using warm water immediately after use.

## STORAGE

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To be kept out of direct sunlight and should be always stored at temperatures between 5°C-30°C. If allowed to freeze, Tekcem cannot guarantee product performance.

## SHELF LIFE

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A minimum of 12 months when stored between 5°C-30°C.

## QUALITY ASSURANCE

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The products are produced in a facility that has a quality management system that is certified and registered to comply with BS EN ISO 9001, ISO 14001, and OHSAS 18001 standards. Our products are covered by a warranty that guarantees against faulty materials and manufacturing. If the goods do not meet the specifications outlined in our promotional literature, they will be either replaced or refunded. Our company cannot assume liability for any issues that may arise from the implementation or utilisation of our products, as we lack direct and ongoing oversight regarding the location and way projects are installed. The sale of all products is dependent upon our standard sales terms and conditions, which can be obtained upon request.

## DISPOSAL

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Once mixed up the product will cure to give an inert material and does not require special disposal. Uncured material should be disposed of accordingly (see relevant Tekcem product material safety datasheet).

## HSE (HEALTH, SAFETY, AND ENVIRONMENTAL)

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It is essential to utilise suitable Personal Protective Equipment (PPE) during the process of preparing, blending, and using products. It is recommended to practise proper hand hygiene by washing hands prior to food consumption. Additionally, it is important to ensure that materials are stored in a secure location to prevent access by children and animals. Ensure proper disposal of packaging and waste in compliance with the regulations set by the local authorities. A full material safety data sheet relating to this product is available from Tekcem.