



## TechnoFloor® Emerishake 500

Emery based dry shake monolithic concrete floor hardener that provides a non-oxidizing, dense and smooth surface with high abrasion and wear resistance

### Description:

TechnoFloor® Emerishake 500 is a pre-blended, ready to use and dry shake formulation for hardening freshly placed horizontal concrete slabs and toppings. TechnoFloor® Emerishake 500 contains specially selected blend of size graded emery aggregate with excellent abrasion and wear resistance along with cementitious binders, plasticizers and admixtures to provide a tough, durable, non-oxidizing, dense and smooth surface with high abrasion and wear resistance.

TechnoFloor® Emerishake 500 provides an extremely hard wearing, abrasion and impact resistant monolithic concrete surface with non-slip characteristics when applied by the shake-on method at the recommended application of 4-6 kg/m<sup>2</sup> depending on requirement.

### Application Includes:

TechnoFloor® Emerishake 500 used for providing a high wear resistant and antiskid surface to newly laid concrete surface by the dry shake method. It finds its best use in indoor and outdoor applications wherever heavy-duty floor finish is required such as-

- Industrial warehouses & factories
- Garages
- Ramps and loading bays & car parks.
- Power stations
- Aircraft hangers

### Features:

- Premixed, ready to use offering factory controlled quality assurance
- Ease of application
- Non-dusting surface
- Non-oxidizing
- Slip-resistant finish can be obtained
- For internal and external use
- Provides a monolithic hardening surface within the concrete matrix
- Provides a hard, abrasion resistant, wear resistant surface
- Provides high impact resistance

### Instructions for Use

- Use a placable and finishable non-bleeding concrete mix of required strength design, with a minimum slump of 75 mm and not more than 3% entrained air. The surface is then floated with a wooden or aluminum float. After casting, any bleeding water from the concrete should be removed.
- Sprinkle TechnoFloor® Emerishake 500 along edges of bags (approx. 100 mm strips) where expansion and contraction joints will be located first. Float into surface using a wooden float.
- As soon as the concrete is firm enough to support the weight of the workman, apply the first shake of TechnoFloor® Emerishake 500.
- Use up to 2/3 of the total shake mix in the first application. Treat areas adjacent to walls and columns first. Spread the material evenly by sprinkling at right angles in two passes close to the floor level. Allow applied material to absorb moisture from the concrete surface. Uniform darker color will be apparent.
- Using a wooden float, float TechnoFloor® Emerishake 500 into the concrete ensuring material becomes an integral part of the surface. Follow second floating immediately after first floating. Employ the balance of the material, follow promptly with second floating using wood or aluminum float or power float in case of large areas. A third power floating may follow for added compaction, if required.

Note: If coarse non-slip finish is required, do not proceed with further floating or trowelling operations after second floating but allow the surface to cure.

### Curing

Curing should be carried out immediately after the final trowelling operation has been completed. It can be done by either covering with wet Hessian cloth and Polythene sheets or by the application of TechnoFinish® ConKure 101/102 curing compound. Immediately after removing Polythene sheet sweep the floor to remove any dust or loose particles.

### Typical Properties at 25°C:

Appearance / Colours	Cement Gray Powder (other colours available on request)
Chemical Base	Natural mineral aggregates graded and mixed with cement, admixtures and pigments.
Hardness (Aggregate)	>8 (Mohs scale of hardness)
Curing	Required
Application rate (kg/m <sup>2</sup> )	Light traffic 3kg/m <sup>2</sup> Medium traffic 5kg/m <sup>2</sup> Heavy traffic 7kg/m <sup>2</sup>
Abrasion Resistance	TechnoFloor® Emerishake 500 exhibited approx. 82% greater abrasion resistance than control Concrete containing 370 kg OPC and W/C ratio of 0.50
Chemical Resistance	Will resist motor oils, mineral oils, mild acids, salt solutions 10%, sea water, soda solution 25% when cured with TechnoFloor® Emerishake 500
Compressive Strength	At28 days >70 N/mm <sup>2</sup> (ASTM C579)
Flexural Strength	At28 days >11 N/mm(ASTM C580)
All values are subject to 5-10 % tolerance	

## Health and Safety instructions

Protect your health while working with this material, always use safety goggles, gloves and safety clothing. When handling hazardous materials or pressurized materials, or during any application that may result in spills, splashes or airborne particles, a full face shield is strongly recommended.

Protect yourself and others on the jobsite. Consider property in proximity of the application area to prevent loss or damage. Protect your jobsite from unauthorized persons. Store all materials and equipment safely and out of reach of children and animals.

Observe container labels, SDS, applicable laws and regulations and all instructions before using the product and equipment. In case one of the components comes in contact with the skin, wash thoroughly with soap and water. Provide adequate ventilation in volume and pattern in working area.

**Additional Information:** Techno Builders Solutions® By Sterling Technotrade India Pvt.Ltd - The Specialist Construction Chemicals Company® range of associated products includes high performance concrete Admixtures, Adhesives, Protective Coatings, Concrete Repairs, Industrial Flooring, Grouts & Anchors, Joint Sealants, Surface Treatments, curing compounds, repair mortars, release agents, Grinding Aids & Waterproofing.

\*Separate datasheet are available on these products.

**DISCLAIMER:** The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.

**EDITION:** 09/2017/001

**IDENTIFICATION NO:** PD-046

Please note that this datasheet supersedes all previous versions.

## Shelf Life

TechnoFloor® Emerishake 500 has a shelf life of 12 months when stored in cool and dry conditions. Extreme temperature, excessive humidity and over exposure to UV will result in the reduction of shelf life.

## Packaging

TechnoFloor® Emerishake 500 is supplied in 30 kg bags.

## Recommendations

- Ensure that enough labor, machinery and material is available to complete treating the whole area before concrete dries
- Do not use TechnoFloor® Emerishake 500 areas exposed to acids.
- In case of coloured floor, test a small area of floor to ensure the color integrity

## Caution

Timing of the broadcast is very important in the application of TechnoFloor® Emerishake 500. Care should be taken that adequate labor, material and machinery is available to complete the whole area while the moisture is still available for the material to fully react and form the required finish. Conversely, full benefit will not be achieved if the material is applied too early when bleed water is still present. Never apply additional water to aid finishing as this could prove detrimental to the whole system and also result in a patchy surface while using colored TechnoFloor® Emerishake 500.

## Precautions & Limitations

Not for use where operating and service conditions dictate the use of a metallic-aggregate surface hardener for greater abrasion and impact resistance.

Not for use in areas exposed to acids and their salts or to materials known to rapidly attack or deteriorate Portland cement concrete.

## Health and Safety instructions

TechnoFloor® Emerishake 500 contains Portland cement and are therefore alkaline when in contact with water. Prolonged contact with the skin should be avoided. During application, wear appropriate protective clothing, goggles, gloves and respiratory equipment. Any eye contamination should be washed immediately with plenty of clean water and medical advice sought.

## Fire

TechnoFloor® Emerishake 500 is non-flammable.

## Storage

Store in dry conditions between 5° C and 30°C, away from sources of heat and naked flames, in the original, unopened packs. If stored at high temperatures the shelf life will be reduced.

## Cleaning

Tools and equipment should be cleaned with water after use. Spillages should be absorbed with sand or sawdust and disposed of in accordance with local regulations. Hardened materials should be removed mechanically.

Product only for professional use.

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