

PRODUCT DATA

tensid[®] uk ltd

Dusthard

Densifys & protects concrete floors

Description and use

Dusthard provides an advanced, blended alternative to conventional sodium or potassium silicate surface hardeners. This penetrating silicate treatment reacts with concrete to produce insoluble calcium silicate hydrate within the concrete pores. Dusthard is appropriate for freshly troweled "green" concrete or existing floors of any age. Hardening/densifying with Dusthard renders concrete floors dustproof. Unlike conventional hardeners which deposit high concentrations of sodium or potassium salts, Dusthard will not trigger or contribute to surface ASR (Alkali Silicate Reaction).

Advantages

- Easy, one step application. No scrubbing. No flushing. No caustic wastewater.
- Penetrates and reacts quickly to produce better initial hardness.
- Renders floors of any age dustproof.
- Provides excellent abrasion resistance
- Tested and conforms to California Collaborative for High Performance School Indoor Air Quality standards. Use can contribute to LEED® for Schools points (EQ Credit 4).
- Performance of treated floors improves with traffic and maintenance.
- Improves performance, appearance and light reflectance of new or old concrete.
- Reduces application time and cost of burnishing and diamond polishing operations.
- Will not contribute to surface crazing. Combats surface ASR.
- Will not absorb water or contribute to floor sweating.
- Gloss and hardness do not reduce slip resistance.
- Breathable and UV stable. Will not yellow, discolor, peel or flake.
- VOC compliant. Non-flammable. Non-toxic. Low odor.
- Cures quickly. Most floors can be opened to traffic within one hour of treatment.
- Treated surfaces are easy to maintain and require no waxing.

Preparation

Protect surrounding surfaces and beware of wind drift. Do not apply to surfaces which have been frozen, dirty or have standing water. Surfaces must be clean, dry and absorbent. Confirm absorbency with a light water spray, if the surface wets uniformly it is suitable for application. Refer to Tensid Uk Ltd for surfaces with inconsistent wetting.

New Concrete

Dusthard can be applied to freshly placed concrete after finishing and installation of the control joints.

When applying to new concrete remove soft cut saw debris prior to application.

Existing Concrete

Dusthard is ideal for application to existing, cured concrete of any age. Surfaces must be clean and structurally sound. Remove all foreign materials including bond breakers, curing agents, surface grease and oil, and construction debris.

Surface and air temperature

Temperature for application should be 4–38°C

Equipment

Apply with a low pressure sprayer, mop or soft bristled broom.

TECHNICAL DATA

Appearance: Clear liquid

pH Value: 11

Boiling Point: N/A

Application Instructions

Freshly placed, uncured steel troweled concrete

1. After final finishing, soft cut control joints
 2. Clean concrete of any dirt, residue etc
 3. Using a low pressure sprayer (1.9 litres per minute) apply a single coat to wet the surface without puddling. Use a clean soft bristle push broom or micro fibre pad to spread product evenly and ensure uniform wetting. Avoid spreading once drying begins, if surfaces dry immediately apply more product. Surface should remain wet for 5-10 minutes. Excess material will extend dry times and create white residues.
 4. Allow treated surfaces to dry
 5. Immediately apply the specified curing compound or initiate the curing procedure.
 6. When curing process is complete, use an automatic floor scrubber equipped with cleaning pads or brushes to remove accumulated construction soiling and surface residues. This procedure will further enhance the surface sheen.
- For additional shine and protection apply Dusthard+ as per data sheet.

Cured, steel troweled concrete

1. Remove all dirt, debris, or curing compounds. Allow cleaning waters used in surface preparation to dry.
2. The prepared surface must wet uniformly. Confirm surface absorbency with light water spray. In hot, dry weather pre-wet the concrete with fresh water. Allow any standing water to evaporate.
3. Using a low pressure sprayer (1.9 litres per minute) apply a single coat to wet the surface without puddling. Use a clean soft bristle push broom or micro fibre pad to spread product evenly and ensure uniform wetting. Avoid spreading once drying begins, if surfaces dry immediately apply more product. Surface should remain wet for 5-10 minutes. Excess material will extend dry times and create white residues.
4. Allow treated surfaces to dry.
5. Remove any dried powder residue using stiff broom, power sweeper or floor scrubbing machine.
6. For immediate, enhanced shine, buff or burnish the dry concrete in both directions using an orbital floor machine or burnisher equipped with an appropriate polishing pad. This is a dry buffing operation.

For additional shine and protection apply Dusthard+ as per data sheet.

Cured, ground/honed concrete

1. Sand level or grind concrete surface with a floor sander, orbital floor machine or burnisher or diamond grinding as required for finish
2. Clean concrete of any dirt, residue etc
3. Using a low pressure sprayer (1.9 litres per minute) apply a single coat to wet the surface without puddling. Use a clean soft bristle push broom or micro fibre pad to spread product evenly and ensure uniform wetting. Avoid spreading once drying begins, if surfaces dry immediately apply more product. Surface should remain wet for 5-10 minutes. Excess material will extend dry times and create white residues.
4. Allow treated surfaces to dry.
5. Remove any dried powder residue using stiff broom, power sweeper or floor scrubbing machine.
6. For immediate, enhanced shine, buff or burnish the dry concrete in both directions using an orbital floor machine or burnisher equipped with an appropriate polishing pad. This is a dry buffing operation.

For additional shine and protection apply Dusthard+ as per data sheet.

Cured and polished concrete

Follow steps 1-5 listed for honed concrete. Use progressively finer abrasives continue diamond polishing in consecutive steps to achieve the desired finish. Remove all polishing dust and debris.

For additional shine and protection apply Dusthard+ as per data sheet.

Dilutions

Use in concentrate. Do not dilute or alter. Stir or mix well before use.

Coverage Rates

Variations in concrete quality, porosity, temperature and relative humidity will affect average rates and drying times. Test an area to determine accurate consumption.

Freshly placed, uncured steel troweled, 7-19 m2 per litre

Cured steel troweled concrete, 7- 16m2 per litre

Cured ground/honed concrete, 7- 14 m2 per litre

Clean Up

Before product dries clean tools and equipment with water. Immediately wash off over spray from glass, aluminium, polished and other surfaces with fresh water.

The floor is ready for use when dry. Maximum water resistance will develop over 7 days. Surface sheen and hardness will increase with time and proper maintenance.

Maintenance

Remove dust and debris daily using a micro fibre pad or dry dust mop. Dry buff with a high speed burnisher to refresh gloss.

Regular maintenance cleaning will improve surface shine.

Do not use acidic cleaners.

For improved resistance to water or oily stains apply SLX100 to the hardened concrete. Do not apply SLX100 on top of Dusthard

Safety Information

Water carried product. Refer to sds for full safety instructions.

Storage and Handling

Store in a cool dry place. Always seal container after dispensing. Do not alter or mix with other chemicals. Keep from freezing in an environment 4–38°C

This Product Data is compiled to be of assistance but is without guarantee. Users are responsible for safe working practices. Always refer to Material Safety Data Sheets (MSDS) for full information before using this product.

For more information and photos please visit:

www.tensid.com

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