

MasterProtect[®] H 303

Clear water repellent based on alkyl alkoxy silane for the protection of concrete surfaces

DESCRIPTION

MasterProtect H 303 is a single component clear, deeply penetrating water repellent used to protect both vertical and horizontal concrete surfaces from deterioration by atmospheric pollution, salt attack and freeze thaw cycles etc.

TYPICAL APPLICATIONS

To protect vertical and horizontal concrete surfaces such as:

- Buildings
- Bridges
- Highways
- Concrete barriers
- Car parks
- Sports stadia
- Cooling towers
- Water towers

ADVANTAGES

- Provides a long-lasting protection: **MasterProtect H 303** penetrates deep into the surface acting as a water repellent that prevents water, salts (chloride ion), atmospheric pollution and freeze/thaw cycles from deteriorating the concrete
- Improves the aesthetics by reducing efflorescence, algae growth and dirt build-up
- Surface appearance remains unchanged
- Reduces volatile organic emissions into the atmosphere in comparison with today's commonly used organic-solvent-based repellents
- Provides a safer working environment for the applicator by minimising health hazards associated with organic solvents
- Ready for use; no dilution on site, which means constant quality
- One coat, no primer
- May be applied to damp substrates
- Application equipment easily cleaned with soapy water
- Virtually no product evaporates during spray application, therefore more active silane can reach its intended target, so minimising wastage and maximising coverage

PACKAGING

MasterProtect H 303 is supplied in 20 L, 200 L and 1,000 L.

TYPICAL PROPERTIES*

Density at 25°C	Approx. 1 kg/L
pH value	>5
Water absorption (After immersion in alkali solution) BS EN 13580	<10%
Determination of carbonation depth in hardened concrete by phenolphthalein method BS EN 14630	0 mm (Class I)
Drying test for hydrophobic impregnation BS EN 13579	110% (Class I)

*Typical values: all tests carried out at 25°C unless otherwise stated.

APPLICATION GUIDELINES

SURFACE PREPARATION

New concrete surfaces should be cleaned of all sand, surface dust/dirt, oil, grease, chemical films/coatings and other contaminants before applications.

A complete water, sand, or shot blast may be needed to achieve the desired surface condition.

Crack control, caulking, patching and expansion joint sealants can be installed before and after application of the sealer. Cure in accordance with manufacturer's instructions.

PLACING / APPLICATION

Surface, air and material temperature should be between +10°C to +35°C during application.

Surfaces to be treated can be slightly damp, but for best results a dry surface is suggested for maximum penetration. **MasterProtect H 303** should not be applied if frost, ice or standing water are visible on the surface to be treated.

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Note: Do not apply **MasterProtect H 303** when temperatures are expected to fall below 5°C within 12 hours or rain is expected within 4 hours of completed application.

Test a small area of the concrete surface before starting general application of any clear, penetrating sealer to assure desired results and coverage rates.

While this product is far less harmful to plant life than solvent-based surface sealers, vegetation should be protected from over-spray. Equipment and incidental areas of over-spray should be cleaned immediately with soapy water to avoid permanent staining. **MasterProtect H 303** will leave a visible residue on non-porous materials such as glass, metal and painted surfaces. When cured, dried materials can be removed by scraping with a metal blade.

Stir material thoroughly before and during application.

Apply to saturation. This may be done with a low-pressure spray (Knapsack Hopper-type), or by pouring, followed by brooming for even distribution on horizontal surfaces. Normal coverage rates are approximately 3 to 5 m²/L. (On lightweight concrete or more porous concrete surfaces, the coverage may be less).

It is recommended that horizontal surfaces treated with **MasterProtect H 303** are left for a minimum of 4 hours to allow proper penetration.

MasterProtect H 303 may leave temporarily a slippery surface for several hours after application. Therefore, vehicle traffic areas should not be re-opened until the treated surface is dry.

COVERAGE / YIELD

Coverage rates may vary with the porosity and finish of the substrate. Typically, the coverage on concrete is 3 to 5 m²/L. A 20 L unit will typically cover 60-100 m².

STORAGE AND SHELF LIFE

MasterProtect H 303 should be stored under cover, clear of the ground and stacked not more than 2 containers high. Protect from freezing. Rotate stock in order not to exceed the shelf life of 12 months. Storage temperature should not exceed 35°C.

HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use. For further information, refer to material safety data sheet.

QUALITY AND CARE

All products originating from Master Builders Solutions Dubai, UAE facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001 and ISO 14001.

* Properties listed are based on laboratory controlled tests.

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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

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