

# MasterProtect<sup>®</sup> H 321

**A water based, silane/siloxane clear water repellent for masonry surfaces**

## DESCRIPTION

**MasterProtect H 321** is a single component, water-based silane/siloxane blend.

**MasterProtect H 321** penetrates deep into the substrate where it reacts chemically. The reaction starts immediately as soon as the active ingredients get in contact with the substrate.

The reaction time depends on temperature, humidity and nature of the substrate. The treated surface does bead water shortly after application of **MasterProtect H 321**.

## TYPICAL APPLICATIONS

**MasterProtect H 321** is a clear penetrating silane/siloxane based water repellent for use on porous and semi-porous substrates such as clay and calcium silicate brick, honed limestone / sandstone and sand-cement render.

## ADVANTAGES

### Aesthetics

Improves the aesthetics by reducing efflorescence, Surface appearance remains unchanged as **MasterProtect H 321** penetrates into the substrate.

### Durable

Long term protection due to deep penetration. Ultraviolet and acid rain resistant.

No influence on moisture vapour permeability.

### Cost effective

One application only.

### Easy to apply

Ready to use, no dilution on site guarantees consistent quality.

Single component.

Application equipment and spillages easily cleaned with soapy water.

### Environmentally friendly

Water based.

Reduces volatile organic emissions into the atmosphere.

No dangerous fumes.

## PACKAGING

**MasterProtect H 321** is supplied in 20 L, 200 L and 1,000 L IBCs.

## TYPICAL PROPERTIES\*

Density at 25°C	Approx. 1 kg/L
Solid content by weight	>5%
Water absorption test ASTM C642 Reduction vs Untreated concrete	Approx. 95%
Water vapor transmission ASTM E96	>30 g/m <sup>2</sup> .d
Reduction in chloride ion penetration ASTM C1202	>90
Chloride ion penetrability ASTM C1202	Very low
Pull-off adhesion strength ASTM D7234	>2 N/mm <sup>2</sup>

\* Typical values. All test were carried out under temperature controlled conditions of 25°C.

## APPLICATION GUIDELINES

For complete details of application rates and methods etc. please ensure the guidelines on the appropriate method statement are followed.

## SURFACE PREPARATION

Surface to be treated must be clean and free from laitance, contaminants and previous water repellent treatments which could cause non-uniform absorption or white staining. Water jetting or sandblasting may be required to achieve the desired condition. Remove efflorescence by dry brushing. Caulking and sealant work must be done prior to the application of **MasterProtect H 321** and allowed to cure in accordance with the manufacturer's instructions.

## MIXING

**MasterProtect H 321** is ready for use, stir lightly.

## PLACING / APPLICATION

The temperature of the surface, the air and the material should be between +10°C to +35°C during the application. Test a small area before starting general application to assure the desired results and coverage rates are obtained.

Only use low pressure, non-atomizing spray equipment. Application should be from bottom up to assist in uniform distribution of **MasterProtect H 321**. Apply in one operation to saturation, with a controlled rundown to a maximum of 20 cm. In certain cases, a mist coat of potable water before

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application may be necessary to help break the surface tension – this will ensure maximum penetration of the saturation coat. Horizontal surfaces should be flood coated as per the recommendations in the method statement.

## CLEANING AND SPILLAGES

Equipment and incidental areas of over spray should immediately be cleaned with soapy water to avoid eventual staining. **MasterProtect H 321** will leave a visible residue on non-porous materials such as glass, metal and painted surfaces when cured. Dried, polymerized material can be removed by scraping with a metal blade. Protect plant life from over spray.

## COVERAGE / YIELD

Typically, 1-4 m<sup>2</sup>/L on masonry surfaces. Coverage rates vary with the nature and porosity of the substrate.

Coverage for both horizontal and vertical application is between 3.0 – 5.0 m<sup>2</sup>/L depending upon surface porosity and any specification requirements.

## STORAGE AND SHELF LIFE

**MasterProtect H 321** should be stored under cover and clear of the ground. Protect from freezing. Rotate stock in order not to exceed the shelf life of 12 months. Storage temperature should not exceed 35°C.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult Master Builders Solutions Technical Services Department.

## 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

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## NOTE

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