

MasterProtect[®] H 1100

Water repellent impregnation for concrete to protect against the ingress of water and water soluble pollutants

DESCRIPTION

MasterProtect H 1100 is a free-flowing, colourless, solvent-free liquid based on a monomeric alkylalkoxysilane. It is specifically intended for the water – repellent impregnation of mineral construction materials in outdoor areas.

MasterProtect H 1100 is supplied ready to use.

TYPICAL APPLICATIONS

For the waterproofing of mineral substrates, in particular low-porosity substrates such as:

- Concrete (road bridges, port installations and all marine concrete structures, concrete facades, exposed aggregate concrete)
- Clinker masonry
- Ceramics tiles
- As waterproofing under coating systems

ADVANTAGES

- Solvent-free product
- Low volatility
- Water vapour permeable, colourless impregnation
- Non film-forming
- Significantly reduces absorption of water and damaging water – borne salts (e.g. chlorides)
- Very good penetration
- Highly alkali resistant
- Stops alkali/silica reactions in concrete
- Frost resistant

PACKAGING

MasterProtect H 1100 is supplied in 20 L and 200 L drums and one tonne bulk containers.

STANDARDS

EN 1504-2

TYPICAL PROPERTIES*

Appearance	Free-flowing colourless liquid
Density @ 20°C (DIN 51757)	880 kg/cm ³
Viscosity	0.95 mPa.s
Flash point (EN 22719)	>63°C
Active ingredient	Alkylalkoxysilane
Solvent	Solvent-free
Active content	>98%
Odour	Hardly perceptible
Boiling point (DIN 51751)	~186°C

APPLICATION GUIDELINES

SURFACE PREPARATION

A curing time of 28 days should be allowed for fresh concrete before **MasterProtect H 1100** is applied.

The surface to be treated should be air-dry and clean in order to ensure deep penetration of the active ingredient. Acceptable surface cleaning methods include sandblasting, water blasting and chemical cleaners. During application the outside temperature and the temperature of the surface should be within the range of 0 to 40°C. The material should not be applied if there is a strong wind or if it is raining. The material must not come into contact with water either before or during use.

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PLACING / APPLICATION

MasterProtect H 1100 must be applied by flow coating to the saturation point. This is achieved by allowing it to flow without pressure against the surface to be treated. All delivery devices for liquids are suitable (airless spray guns, for example). The material must not be atomized or applied with a brush.

A liquid film of **MasterProtect H 1100** must remain in contact with the substrate for several seconds.

Horizontal surfaces should have shiny, wet appearance for 3-5 seconds. Vertical surfaces should exhibit a 30-50cm shiny curtain of liquid.

All equipment and containers must be clean and dry.

After use they can be cleaned with any organic solvent (methylated spirit, petrol or thinners).

Non-absorbent substrates such as, for example, glass, wood, plastic and metal cannot be treated with **MasterProtect H 1100**. Glass, wood and metal are not attacked by **MasterProtect H 1100**. Neither is most plastics used in construction. Therefore, covering is normally not necessary. To make it sure we recommend carrying out a test. In the worst case, product not absorbed by the substrate may react with atmospheric moisture to form a greasy, glossy silicone resin film, which can easily be removed if cleaned immediately using conventional cleaning agents, or alcohol.

Plants in the vicinity of the substrate to be treated should be protected against contact with **MasterProtect H 1100**.

MasterProtect H 1100 reacts with the interfaces in pores and capillaries of the mineral surface and forms invisible, water-repellent interfacial compounds. To check compatibility of previous and/or following treatments with the **MasterProtect H 1100**, kindly consult Master Builders Solutions Technical Services Department for test-trials at site.

COVERAGE / YIELD

The amount to be applied depends to a large extent on how absorbent is the substrates. To determine the exact amount to be applied it is recommended to do a small test patch first. Kindly consult Master Builders Solutions Technical Services Department for test-trials at site.

On dense concrete substrate coverage shall vary from 150-250 ml/m² (subject to site-based trials).

STORAGE AND SHELF LIFE

Store under cover, out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air-conditioned environment.

Shelf life is 12 months when stored as above.

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

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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 (which can also be tainted with vapour until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use. Do not reuse containers for storage of consumable item. For further information refer to the material safety data sheet. MSDS available on demand or on Master Builders Solutions Construction Chemicals website.

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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