

Epicuro High Penetration Silane II

Class II hydrophobic impregnation silane for new & refurbished concrete

PRODUCT DESCRIPTION

Epicuro HP (High Penetration) Silane II is a safe to use, deep penetrating (up to 50mm) Hydrophobic Impregnation Silane. This unique penetration characteristic is due to its small, nano-size molecule, some 20 times smaller than those of low penetration Silane/Siloxane products.

Epicuro HP Silane II achieves CLASS II performance rather than lower CLASS I, which is normal with other Silane/Siloxane based products. This is due to Epicuro HP Silane II containing >95% active ingredients.

Epicuro HP Silane II is a colourless, water and solvent free impregnation product designed to provide in-depth protection in concrete and materials of mineral origin, against water, humidity, chlorides, corrosion and salt migration.

Epicuro HP Silane II is a non-film-forming product i.e. it allows the material to "breathe". It is also very effective on microcracks up to 0.3 mm, and stops alkali-silica or alkali-aggregate reactions in concrete and construction materials.

Epicuro HP Silane II is ideal to protect Civil Engineering structures (road bridges, rail bridges, marine structures, car parks and architectural concrete).

CHEMICAL PROPERTIES

Alkylalcoxysilane base.

PERFORMANCE

EN1504-9 CLASS II (>10mm penetration)
Hydrophobic Impregnation product.

PACKAGING

20 and 1,000 Litre containers.

ADVANTAGES & CHARACTERISTICS

- Deep penetration
- Safer, non-flammable Silane formulation
- Efficient in only a few hours!
- Can be over-coated after 4 hours
- Permeable to water vapour.
- Non-film-forming: does not affect the mineral appearance of surfaces.
- Effective under high humidity conditions.
- Protection against chemical or biological agents that are water soluble (particularly chlorides).
- Highly resistant to alkaline substances.
- Ready to use
- Solvent free

TECHNICAL DATA

| | |
|---------------------------------|--------------|
| Physical state at 20°C | : Liquid |
| Colour | : Colourless |
| Odour | : None |
| pH | : NC |
| Boiling Point [°C] | : 186 °C |
| Density | : 0.88 gm/cc |
| Solubility in water [vol/vol] | : Insoluble |
| Flashpoint [°C] | : 63 °C |
| Silane Content | : >95% |
| VOC | : <20 g/l |
| Refractive Index | : With batch |
| Depth of penetration (Class II) | : >10% |
| Absorption ratio | : <7.5% |
| Absorption ratio (alkali) | : <10% |
| Drying rate (Class II) | : >10% |

CONSUPTION

Consumption depends on the porosity of the concrete or other substrate. The values below are given only as an indication:

Recommended 400ml/m² per coat

STORAGE

Store away from frost and heat in a dry place: temperature between 5 °C and 30 °C.

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INSTRUCTIONS FOR USE

- Shake the container well before use.
- The surface must be dry, clean and free of any trace of oil, grease, cleaning product, dust, efflorescence, paint or any other substance liable to prevent the correct penetration of **Epicuro HP Silane II**.
- Use the product in it's pure state: NEVER dilute.
- **Epicuro HP Silane II** can be applied either with a brush or with a low-pressure sprayer.
- Apply 1 to 2 coats until saturation is achieved, according to surface sorptivity, degree of exposure to weather and abrasion. In exceptional cases, coastal, marine tidal environments, **Epicuro HP Silane II** must be applied in 3 or more coats (seek advice from Epicuro Ltd).
- **Epicuro HP Silane II** can be treated or over-coated a minimum of 4 hours after application.

CLEANING OF EQUIPMENT

Clean tools and equipment immediately after use with ecological cleaners.

SHELF LIFE

Provided the container is kept closed whilst not in use, and kept within the recommended storage temperature: storage life 24 months.

RECOMMENDATIONS

Only treat surfaces which have been cleaned of any atmospheric pollution.

For perfect application and effective protection, **Epicuro HP Silane II** must be shaken and always used when the temperature of the surfaces to be coated is above 5 °C. Avoid application in high winds.

Do not apply in rainy, frosty or extremely hot weather. Temperature between 5 °C and 30 °C.

NEVER dilute or mix with another product.

APPROVED APPLICATOR SCHEME

Approved Applicator training in product 'technology and application' is provided by Epicuro Protective Materials Ltd.

HEALTH & SAFETY

Always refer to product MSDS prior to use to ensure appropriate PPE is used.

- **Respiratory protection:** Wear adequate protection mask.
- **Hand protection:** Wear rubber gloves.
- **Skin protection:** No special clothing or skin protection is recommended under normal conditions of use.
- **Eye protection:** If there is a risk of considerable splashing, wear protective goggles.
- **In the event of ingestion:** do not induce vomiting. Contact a doctor or a specialist.

KEEP OUT OF THE REACH OF CHILDREN

TECHNICAL ASSISTANCE

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Important: The content of this documentation is based on our experience of the product. Epicuro Protective Materials Ltd guarantees the quality of its products, but expressly declines any liability in the event of failure by the user to comply with the recommendations and conditions of use of said products, notably but not exclusively in the event of incorrect application, application by unqualified personnel, use of products not compatible with Epicuro's products or bad weather conditions. For further information, refer to the safety data sheet.

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