

## PRODUCT INFORMATION

### PROTECTASILANE 100W

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Updated: 01/01/2025

**Manufacturer's Code:** RPPS100W

**Product Name:** PROTECTASILANE 100W

**Description:** PROTECTASILANE 100W is a water-based silicone water repellent containing 100% active silane/siloxane concentrate. PROTECTASILANE 100W is neutral and contains no salts and no solvents. The product is required to dilute with 1 part to up to 700 parts water to form a water repellent before application. The product is typically designed to replace sodium or potassium silicate solution for treating clay bricks or clay tiles or other masonry materials by dipping application in factory. The product may be also used for spraying application either in the production line or used on site for masonry substrates.

**Recommended Uses:** PROTECTASILANE 100W is recommended as a water repellent sealer for protecting permeable masonry substrates such as fired clay bricks or other masonry substrates against water penetration and efflorescence by either dipping or spray applications.

Some of the important features of PROTECTASILANE 100W include:

- 100% active readily soluble in water containing no salts and no solvents.
- Deeply penetrate into masonry substrates.
- Permanently bonds to the masonry substrates with no peel or blister.
- Forms UV, alkali stable and durable siloxane crosslinking structure becoming part of masonry substrates.
- Reduces water penetration and prevents efflorescence.
- Does not change the surface appearance and vapour permeability with no deposits of white efflorescence to the treated surface.

**Use Instructions:** PROTECTASILANE 100W should be diluted with water to form a working solution at a ratio of 1 part PROTECTASILANE 100W up to 700 parts water before use. The diluted solution should be used up as soon as possible. The shelf life of the diluted solution may vary from a few hours to a few days depending on the dilution ratio and the use conditions.

**Dilution ratio:** Following dilution ratio is typically recommended for water repellent treatment for clay bricks or clay tiles replacing silicate dipping treatment:

| Application | Dilution ratio by weight |
|-------------|--------------------------|
| Dipping     | 1:200 or more            |
| Spraying    | 1:50 or more             |

Please note that, for low performance treatment, above dilution ratio may be further extended. The product can be diluted to a maximum dilution ratio up to 1 part PROTECTASILANE 100W to 700 parts water. A test should be conducted for the best dilution ratio required.

**Dilution method:** Deionised or distilled water with neutral pH is recommended for dilution. The dilution procedure is preferably conducted under 25°C in a clean, dry and well ventilated environment away from fire or ignition source. The dilution should be carried out in a clean container equipped with a mechanic or manual stirrer. Place water first into the container and then slowly add PROTECTASILANE 100W with

constant stirring. Continue stirring until the solution becomes clear. The mixing time depends on temperature and water quality and may vary from 5 to 10 minutes or more. Stop stirring until no oily PROTECTASILANE 100W droplets be visually observed on top of the solution after dilution. Check the final pH of the solution being approximately at pH5 to 6. The solution is now ready to use.

Please note that the shelf-life of the above diluted solution is limited. The solution should be used as soon as possible. The shelf-life of the diluted solution depends on the use conditions. Increasing dilution ratio may extend the shelf-life. The diluted solution is sensitive to contaminations which would significantly reduce the shelf-life. The temperature also affects the stability of the solution. Increasing temperature would significantly reduce the shelf-life of the diluted solution. We recommend conducting practical trials before formal application.

**Typical Data:**

- Appearance: Colourless liquid
- Active ingredient: 100%
- Specific Gravity: 0.91-0.96 g/ml at 20°C
- pH value: Not allocated
- Solubility in water: Dissolvable in water
- VOC content: Nil
- Flash point: 27°C

**Important Note:**

As masonry substrates vary significantly, a test **MUST** be carried out prior to application to determine the suitability of this product for the purpose.

**Handling & Storage:**

PROTECTASILANE 100W is a flammable liquid. Refer to the material safety data sheet for safe handling. Follow good industrial hygiene procedures when using this product. Vapour inhalation and skin or eye contact should be avoided by wearing proper protection. Wear an air-purifying respirator if there is a risk of exposure to high vapour concentrations. Wash hands after handling. The product should be stored in closed containers in a cool dry place away from any fire and ignition sources. The product has a shelf life of 12 months in a sealed original container under 25°C. The product should be used as soon as possible after the container is opened

Use under sufficient ventilation away from any fire or ignition sources!

Keep out of reach of children!

**Packaging:**

PROTECTASILANE 100W is available in 20 or 200 litre metal drums.

**Disclaimer:**

The information given in this data sheet is based on many years of experience and is correct to the best of our knowledge. As the storage, handling and application of this material is beyond our control; we can only be responsible for the quality of our product at the time of dispatch. We reserve the right to alter certain product parameters within the spectrum of properties in order to keep abreast of technical advances. It is the responsibility of the end user to determine the suitability of this material for any particular application.