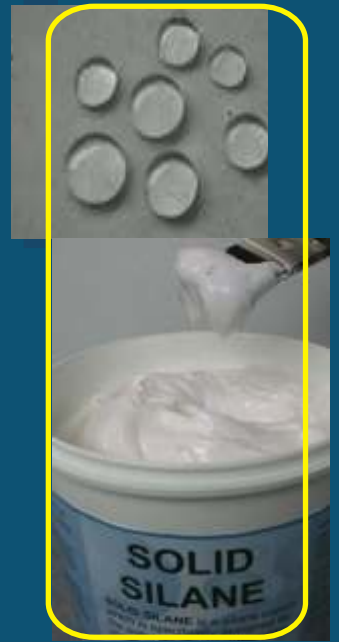


# SOLID SILANE

A BETTER WAY TO TREAT CONCRETE WITH SILANE

# SILANE



SOLID SILANE SOLID SILANE

**SILANE TREATMENT OF CONCRETE** The silane treatment of reinforced concrete is a proven way of protecting reinforced concrete from corrosion caused by water and chloride ion.

**LIQUID SILANES** The commonly used silanes are very low viscosity, volatile liquids that are difficult to apply in windy or hot conditions. Additionally, two or three individual coats are required to achieve an acceptable penetration depth.

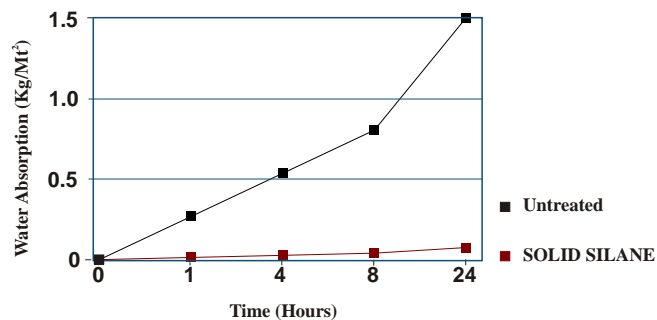


**SOLID SILANE** is a new concept that overcomes the problems associated with the use of liquid silanes. SOLID SILANE is an Alkyltrialkoxo Silane, formulated as a non-drip thixotropic emulsion.

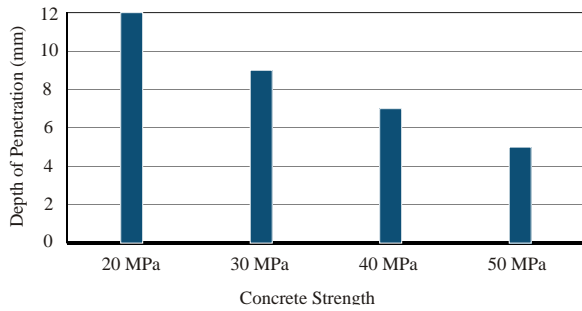
**SOLID SILANE** can be applied to any surface (overhead, vertical and horizontal) without run off. The silane gel remains on the surface for up to 2 hours ensuring deep and even penetration into the concrete. The high penetration depths achieved are due to the low volatility of the silane gel, combined with the long contact time with the surface.

**TIME SAVING** - One coat of SOLID SILANE will achieve similar penetration depths as several coats of liquid silane; application costs can thus be reduced.

**NO WASTE** - Unlike liquid silanes, SOLID SILANE does not run off surfaces uncontrollably. The material remains on and penetrates into the area it was applied to. This reduce waste and potentially damaging over-spray and contamination of waterways and environment.



**WATER AND CHLORIDE ION EXCLUSION** SOLID SILANE significantly reduces the water and chloride ion absorption of concrete.

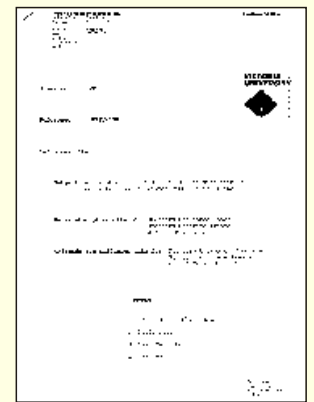
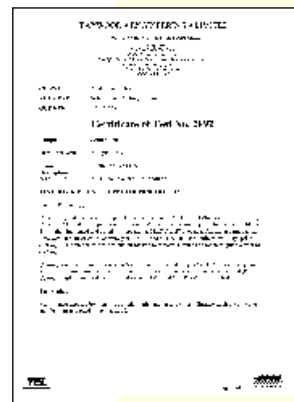


**DEPTH OF PENETRATION** SOLID SILANE penetrates evenly and deeply into concrete. One coat of 500ml/m<sup>2</sup> penetrates up to 12mm into 20MPa concrete. The penetration into 50MPa concrete can reach to 5mm.

Core samples removed from a new bridge structure revealed a 5-7mm penetration depth in the 50MPa Concrete.



**TESTING** SOLID SILANE was tested and its effectiveness proven by Taywood engineering and the Victoria University of Technology.



Measurement of applied film Thickness

**QUALITY CONTROL** The quality control for on-site application is simplified when using SOLID SILANE. Areas treated with SOLID SILANE are clearly visible as the product is a lingering white gel. The long contact time enables accurate measurement of the application rate using a film thickness gauge.

**PROJECTS** SOLID SILANE has been used in numerous projects including:



Phillip Island Bridge, Victoria Australia



Brisbane Port, Queensland Australia



Gateway Bridge, Queensland Australia



**APPLICATION** The concrete surface must be clean and dry before application. SOLID SILANE is best applied using conventional airless spray equipment. Generally one application is required as the product can be applied at up to 500ml/m<sup>2</sup>. The typical application rate on high quality concrete is 300-400ml/m<sup>2</sup>. Two coat application at lower application rate per coat may be required if concrete is very dense.

Vertical and horizontal overhead application is simplified, as the product does not drip uncontrollably onto the operator and other surfaces. The low runoff is especially valuable during the treatment of marine structures where it is vital not to pollute the marine environment.

#### **PHYSICAL PROPERTIES**

Appearance - White Cream  
Active contents - > 80%  
VOC contents - nil  
Density - ca. 0.90 g/ml  
pH - ca. 8  
Flash Point - >61°C  
Solubility in Water - Miscible

#### **AVAILABILITY**

SOLID SILANE is available  
in 20 litre pails and 200 litre drums.

## **Tech-Dry<sup>®</sup>**

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#### **IMPORTANT NOTE**

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