BUILDING TRUST

BUILDING PRODUCT INFORMATION SHEET

Sikagard®-740 W

Silane based reactive water repellent impregnation

DESCRIPTION

Sikagard®-740 W is a one-component low viscosity, reactive impregnation for concrete and cementitious substrates based on concentrated Silane emulsion. Sikagard®-740 W complies with the requirements of EN 1504-2 for hydrophobic Impregnation (penetration depth class I & resistance to freeze and thaw salt stresses)Sikagard®-740 W is classified as sealer Type 1b to the ALBERTA infrastructure and transportation specifications.

USES

Sikagard®-740 W is used as water-repellent impregnation (hydrophobic treatment) for absorbent substrates such as concrete in civil engineering or building concrete structures in both vertical and horizontal traffic area:

- Suitable for protection against ingress (Principle 1, method 1.1 of EN 1504-9)
- Suitable for moisture control (Principle 2, method 2.1 of EN 1504-9)
- Suitable for increasing the resistivity (Principle 8, method 8.1 of EN 1504-9)

FEATURES

- Good penetration
- Economic and easy to use
- Reduces capillary water absorption, protection against driving rain and splashing on vertical areas
- Reduction of absorption of aggressive or deleterious agents dissolved in water (i.e. chlorides)
- No change in water vapour permeability
- Increases the resistance of concrete to freeze and thaw cycles and de-icing salts
- Water based emulsion, Low VOC
- Resistant to sea water
- Ready to use

LIMITATIONS OF USE

The need for concrete repair, as defined in Standard NZS3109 - Concrete Construction, refers primarily to concrete defects arising from construction, placing and finishing actions. Repair options for concrete damage outside the scope of the NZ Building Code and arising from other causes, (e.g. fire, explosion, earthquake, chemical attack, etc) requires specialist engineering expertise to undertake specific project investigation and specification.

APPROVALS / CERTIFICATES

- Conformity to the requirements of the EN 1504-2 class I – MPL, Sika Tüffenwies dated July 2009
- CTL (US) report, April 2009: Scaling resistance (ASTM C 627 / C 672M-03), Rapid Chloride permeability (ASTM C 1202-08), NCHRP Report 244 Series II & IV, AASHTO T 259 & T 260 Chloride penetration.
- AMEC (Canada), January 2010, Compliance to ALBERTA Infrastructure and transportation specifications
- Hydrophobic impregnation according to EN 1504-2, DoP 02 03 03 01 002 0 000048 1105; certified by Factory Production Control Body: 0921; certificate 0921-CPD-2050 and provided with the CE-mark

PRODUCT INFORMATION

Product identifier	Sikagard®-740 W
Place of manufacture	Overseas
Composition	Alkoxysilane
Active content	~40%
Packaging	19 kg (20 l) pail and 210 kg (200 l) drum

Shelf life	9 months from date of production if stored in unopened, undamaged and original sealed packaging.	
Storage conditions	Store in dry and cool conditions. Protect from moisture and frost.	
Appearance and colour	Milky water like liquid emulsion.	
Density	~0.950 kg/l (at +25 °C)	
Volatile organic compound (VOC) content	< 350 g/lt	(ASTM D 5095 91 / EPA Method 24)

TECHNICAL INFORMATION

Penetration depth	< 10 mm	Class I	(EN 1504-2)
	*Test performed on concrete with a W/C = 0.70		
Water absorption	< 7.5%		(EN 13580)
Resistance to alkalinity	< 10%		(EN 13580)
Freeze thaw de-icing salt resistance	Comply		(EN 13581)
Drying time	Class I:	>30%	(EN 13579)

SYSTEM INFORMATION

System structure	2–3 coats applied "wet on wet"

APPLICATION INFORMATION

Consumption	Dependent on absorbency of the substrate as well as the required penetration depth: ~ 100 to 150 g/m^2 per coat
Ambient air temperature	+5 °C min. / +35 °C max.
Substrate temperature	+5 °C min. / +35 °C max.
Substrate moisture content	<5-6% when measured with Tramex method
Waiting time to overcoating	Can be overcoated with water and solvent based polymer paint - contact the proposed paint manufacturer for recommendations. Sikagard®-740 W can be used as a water repellent primer under many Sikagard® protective coatings. Penetration of water is thus prevented at possible weak spots or in the event of damage to the top coat and the risk of consequential damages such as paint flaking can be reduced.Waiting time: minimum 5 hours, maximum 1 week.
Curing time	Sikagard®-740 W does not require any special curing but must be protected from rain for at least 6 hours at +20 °C.

MANUFACTURER AND IMPORTER INFORMATION

Manufacturer information	Address	Sika Supply Centre AG Industriestrasse 26 6060, Sarnen Switzerland
Importer information	Address	Sika (NZ) Limited 85-91 Patiki Road Avondale, Auckland 1026 New Zealand
	Phone number	0800 745 269
	Website	https://nzl.sika.com/

Email address	info@nz.sika.com
NZBN	9429000018791

BUILDING CODE INFORMATION

Building Code clauses	Note: This product, on its own, is not within the scope of the NZ Building Code. However when it is used in conjunction with another product, or system that must comply with the code then it will contribute to meeting the following clauses B1 Structure: Performance Clauses B1.3.1, B1.3.2, B1.3.3 (a, b, f, h, m, q) B1.3.4 B2 Durability: Performance clause B2.3.1-(a) not less than 50 years F2 Hazardous Building Materials: Performance clause F2.3.1
Building Code compliance statements	Performance B1.3.1, B1.3.2, B1.3.3 (a, b, f, h, m, q): B1.3.4 Sika MonoTop, Sikacrete, Sikagard and Sikadur concrete repair and protection products comply with their relevant parts within EN1504. (refer to "Refurbishment- Improved Sika Monotop Systems - An Overview For Designers and Specifiers" available at nz.sika.com) When they are used to repair and restore the integrity of damaged or defective concrete, as specified within the scope of NZS3604:2011, they contribute to the concrete meeting the preceding B1 Structure performance clauses Performance B2.3.1 (a) 50 years: This product has been evaluated in accordance with B2/VM1. It meets this durability requirement and will remain serviceable for 50 years, or more, when installed and maintained in accordance with the relevant Sika technical literature. nzl.sika.com. According to Sika's "Service Improvement" records, maintained within its ISO9001:2015 Quality Management System, this product has performed successfully since it was introduced in 2011. Performance F2.3.1: This product meets this requirement when used and applied in accordance with Sika's installation instructions and does not present a health hazard to people occupying or using the building. Refer to the Sika Product Technical Data sheet and product Safety Data Sheet nzl.sika.com for further information if required

BASIS OF PRODUCT DATA

All technical data in this document are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

IMPORTANT CONSIDERATIONS

- Best results are achieved when Sikagard®-740 W is applied on 28 days old concrete – however, due to its high alkali resistance; it is still possible to apply it at an early age – lower penetration might then be expected.
- Areas such as window frames which still need to be painted must be securely covered to avoid contact with Sikagard®-740 W.
- Areas not to be impregnated such as window panes need to be protected from being accidentally contaminated with Sikagard®-740 W.
- Sikagard®-740 W can damage some coatings and bituminous products.
- In rare cases, Sikagard®-740 W might lead to light darkening of concrete, apply sample areas first.
- Cannot be overcoated with limewash or cement paint.
- Apply Sikagard®-740 W onto a sample area to confirm consumption rates versus penetration depth.
- Refer to the latest Method Statement for detailed information regarding surface preparation, application method, etc.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

MIXING

Sikagard®-740 W is supplied ready for use and must not be diluted.

APPLICATION

Sikagard®-740 W is applied using a low-pressure spray, airless spray, brush or roller, in a single pass from bottom up taking care not to let the product run. Apply subsequent pass “wet on wet” until the required consumption is achieved. On horizontal surface, use flooding technique but avoid excessive ponding on the surface.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be mechanically removed.

SUBSTRATE QUALITY

Free of dust, dirt, oil, efflorescence and existing paint coatings.Cracks in concrete more than 300 µm must be repaired first prior to carry out the hydrophobic treatment.Cleaning is best done with suitable detergents or by light blastcleaning, steam cleaning etc.Best results are obtained on dry, very absorbent substrates. The substrate must look dry with no damp patches.

MAINTENANCE REQUIREMENTS

The maintenance requirements for this Sika product are the same as for the host / surrounding substrate

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

The building product/building product line is not subject to warning or ban under section 26 of the Building Act 2004.

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