

Product Data Sheet
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Sikagard®-702 W Aquaphobe

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Silicone based water repellent impregnation

Product Description

Sikagard®-702 W Aquaphobe is a concentrate of silicone micro-emulsion. When diluted with water, it becomes a water repellent impregnation with good penetration abilities.

Uses

As an impregnation for mineral substrates including concrete and cementitious rendering, natural and reconstructed stone, aerated concrete, brickwork (non vitrified brick), fibre cement, mineral paint coats etc. against driving rain and water ingress.

Characteristics / Advantages

- Reduction of capillary water absorption
- Reduction of absorption of harmful substances dissolved in water
- No change in water vapour permeability
- Good penetration into concrete
- Treatment is usually invisible not modifying the substrate appearance
- Improves the resistance to dirt pick up, and reduces fungi, algal and lichens growth
- Highly resistant to alkalis

Tests

Approvals / Standards

Conforms to the requirements of Certificate No. P 1635/A dated 16.06.98, Polymer Institute Flörsheim.

Sikagard®-702 W Aquaphobe is registered in the "Compilation of approved materials and systems" according to OS-A and OS-B at the Federal Department of Street Construction (BAST) Germany.

Product Data

Form

Appearance / Colour Yellowish liquid.

Packaging 1 l can.

Storage

Storage Conditions / Shelf Life 12 months from date of production if stored in unopened, undamaged and original sealed packaging, in dry and cool conditions. (Sikagard®-702 W Aquaphobe concentrate is not sensitive to frost, down to -20°C). Protect from heat and direct sunlight.



Technical Data

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|----------------------|---|
| Chemical Base | Silicone micro-emulsion. |
| Density | ~ 0.900 kg/l (at +20 °C). |
| Solid Content | 100% (undiluted). Active substance content: 60% (undiluted). |
| Flash Point | > 28 °C |

Resistance

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| Chemical Resistance | De-icing salts, water. |
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System Information

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| System Structure | 2 - 3 x Sikagard®-702 W Aquaphobe applied "wet on wet". |
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Application Details

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| Consumption | ~ 0.15 - 0.20 kg/m ² per coat for normally absorbent substrates. The consumption as well as the number of applications required is dependent on the substrate profile and porosity; a test to confirm the necessary consumption is strongly recommended. |
| Substrate Quality | Free of dust, dirt, oil, efflorescence and existing paint coatings. Cracks in concrete of more than 200 microns must be repaired prior to application of the hydrophobic treatment. |
| Substrate Preparation | Cleaning is best achieved by brushing with suitable detergents or by light blastcleaning or steam cleaning etc. Best penetration results are obtained on dry, very absorbent substrates. The substrate must look dry with no damp patches. For use on fair faced concrete we strongly recommend a sample area and to check that the moisture content near the surface, and down to 1 cm depth, is less than 5%. |

Application Conditions / Limitations

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| Substrate Temperature | +8 °C min. / +30 °C max. |
| Ambient Temperature | +8 °C min. / +30 °C max. |
| Substrate Humidity | 5% max. |

Application Instructions

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| Mixing | <p>If used in accordance with ZTV-OS, 1 part by weight of Sikagard®-702 W Aquaphobe with 4 parts by weight of clean water.</p> <p>For other applications dilution down to 1 : 9 is feasible for dense substrate.</p> |
| Application Method / Tools | <p>Sikagard®-702 W Aquaphobe is applied using low pressure spray, brush or roller, working from top to bottom taking care not to let the product run.</p> <p>Apply subsequent coats "wet on wet".</p> |
| Cleaning of Tools | <p>Clean all tools and application equipment with clean water immediately after use. Hardened / cured material can only be removed mechanically.</p> |
| Potlife | <p>Only thin as much material as can be used up in one working day.</p> |
| Waiting Time / Overcoatability | <p>Can be overcoated with water/solvent based polymer paints - contact the paint manufacturer for details.</p> <p>For overcoating with Sikagard®, SikaColor® Emulsion or solvent based coating, wait at least 5 hours after the hydrophobic impregnation.</p> |
| Notes on Application / Limitations | <p>Minimum age of concrete or mortar: at least 4 weeks.</p> <p>Building components (e.g. window frames) which still need to be painted must be protected from contact with Sikagard®-702 W Aquaphobe.</p> <p>Test on a sample surface before use.</p> <p>Cannot be overcoated with limewash or cement paint.</p> <p>In situations where the brickwork contains high salts (efflorescence), Sikagard®-702 W Aquaphobe cannot penetrate well enough into the pores of the substrate, so further efflorescence may still occur.</p> <p>The water repellent effect is not fully effective on horizontal surfaces.</p> <p>If there are joints to be sealed on concrete surfaces which have been impregnated with Sikagard®-702 W Aquaphobe, e.g. precast concrete elements, adhesion to these pre-treated surfaces may be impaired. The appropriate primers for the additional products must always be used.</p> |
| Curing Details | |
| Curing Treatment | <p>Sikagard®-702 W Aquaphobe does not require any special curing but must be protected from rain for at least 3 hours at +20°C.</p> |
| Value Base | <p>All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.</p> |
| Local Restrictions | <p>Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.</p> |
| Health and Safety Information | <p>For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.</p> |

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.



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