

PRODUCT DATA SHEET

Sika[®]-1 s

PORE-BLOCKING INTEGRAL ADMIXTURE WITH HYDROPHOBIC PROPERTIES

DESCRIPTION

Sika[®]-1 s is an integral admixture which greatly reduces the water absorption of concrete through its pore-blocking and hydrophobic actions. The incorporation of Sika[®]-1 s in the concrete mix ensures its beneficial effects are distributed throughout the matrix, thus enhancing durability.

USES

Sika[®]-1 s is recommended for use in the production of watertight concrete for:

Water-retaining structures, e.g:

- Reservoirs and water tanks
- Waste-water treatment plants
- Dams
- Swimming pools
- Containment bunds
- Sewers and pipelines

Waterproof facilities and structures, e.g:

- Basements
- Parking garages
- Underground stations
- Utility vaults
- Tunnels
- Marine structures
- Foundations, piles and pile caps

CHARACTERISTICS / ADVANTAGES

Sika[®]-1 s has the following properties:

- Very low water absorption providing water-tightness and increased durability
- Chloride free
- Ammonia free
- Compatible with other Sika admixtures
- Compatible with most finishes

PRODUCT INFORMATION

Packaging	20 L pails and 200 L drums
Appearance / Colour	Amber liquid
Shelf Life	12 months from the date of production.
Storage Conditions	Stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +30°C. Keep away from direct sunlight.

TECHNICAL INFORMATION

Mortar mix design	<ul style="list-style-type: none"> ▪ Minimum binder content 380 kg/m³ (including PFA or GGBFS) ▪ Maximum W/C ratio 0.43
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Indicative performance of mortar mix

- Final mix should be cohesive and easily compacted without bleed or segregation.
- Sika®-1 s will have no significant water reducing or slump keeping properties.
- Sika®-1 s is suitable for use in conjunction with all normally used retarders, plasticizers and superplasticizers.

APPLICATION INFORMATION

Recommended Dosage

- Sika®-1 s is dosed at a recommended dosage of 1.5 – 2.0 litres per 100 kg cement. However, the optimum dosage to meet project requirements must be determined through trial mixes.
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BASIS OF PRODUCT DATA

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.

FURTHER DOCUMENTS

- Ambient conditions at site (temperature, humidity and wind) and the components of concrete may affect the setting time, compressive strength and permeability of concrete. Therefore, it is recommended that plant trials be carried-out to determine and address these parameters before actual pour.
- When dispensing Sika®-1 s into fresh concrete, ensure the fresh concrete is mixed until Sika®-1 s is distributed homogeneously into it.

Please contact Sika's Technical Service Department for assistance in plant trials.

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

APPLICATION METHOD / TOOLS

Dispensing

- Mix Sika®-1 s thoroughly before use
- Sika®-1 s liquid should be dispensed directly into the mixing water prior to addition of other concrete components such as coarse aggregate, sand and cement. Ensure mixing water is potable and free from contaminants.
- Preliminary trials are recommended if Sika®-1s is dispensed together with other admixture.

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- Sika®-1 s can also be directly dispensed into fresh concrete. Do not add Sika®-1 s directly to dry cement.

Compatibility

Sika®-1 s is compatible with all types of Portland cement including Sulphate Resistant Cement (SRC) and blended cements.

Equipment

Sika®-1 s should be dispensed through a suitable calibrated dispenser.

LOCAL RESTRICTIONS

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.

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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Product Data Sheet

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