

Product Data Sheet
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Sika®-4a

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Quick setting waterproofing admixture

Product Description

Sika®-4a is a quick setting, liquid waterproofing admixture that causes rapid setting and hardening of Portland cement. The addition of Sika®-4a to fresh Portland cement gives an initial setting time of between 15 and 45 seconds.

Uses

Sika®-4a is used for the preliminary waterproofing of wet substrates, such as concrete or masonry, prior to the application of the Sika®-1 RENDER SYSTEM.

Sika®-4a is also used to seal and channel, moderate and severe water infiltrations in concrete, rock and masonry.

Characteristics / Advantages

- Easy to use
- Economical
- Rapid leak plugging
- Chloride free

Product Data

Form

Appearance / Colour Liquid Clear

Packaging 5 and 25 litre containers

Storage

Storage Conditions / Shelf-Life 12 months in original, unopened container. Store in a dry area between 5°C and 30°C. Protect from direct sunlight.

Construction



Technical Data

Density 1,25kg/litre

Application Details

Consumption / Dosage 2 to 4 litres per 50kg cement

Substrate Preparation/Priming All substrates must be clean, sound and properly cured. Remove all loosely adhering materials.

Preliminary Waterproofing Applications

All substrates must be thoroughly roughened by wire brushing, or by water or sand blasting.

Sealing and Channelling Water Infiltration's

The cavities and fissures to be sealed may have to be enlarged to provide a sufficient bonding area.

Application Conditions / Limitations

Substrate Temperature Min. 5°C – max. 30°C.

Ambient Temperature Min. 5°C – max. 35°C.

Application Instructions

Mixing (Ratio/Dosage) Ensure that Sika®-4a is thoroughly mixed prior to use.

Dilute one (1) part by volume of Sika®-4a with one (1) to four (4) parts by volume of clean water in a suitable container. The concentration of this dilution will depend upon the level of water pressure. The higher the water pressure the lower the dilution ratio.

Add one (1) part by volume of the diluted Sika®-4a to three (3) parts by volume of fresh Portland cement in a suitable container. Mix rapidly (i.e. for a few seconds) and thoroughly until a smooth homogeneous paste is formed. **Use immediately.**

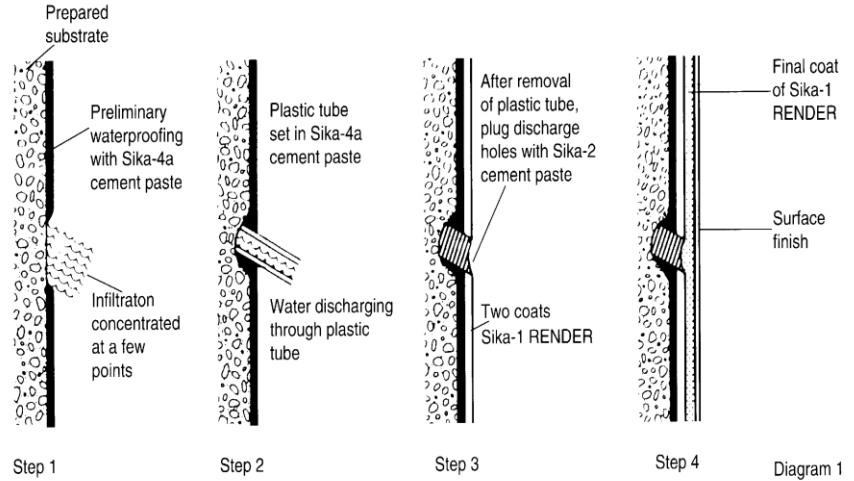
Application Method / Tools

Preliminary Waterproofing Applications

Apply a minimum thickness of 6mm by gloved hand or trowel over the entire surface ensuring that the cement paste is worked well into the surface. The surface should be scratched after application to ensure the adequate adhesion of the subsequently applied Sika®-1 render system.

Allow the Sika®-4a cement paste to cure for 4 to 6 hours before over coating.

In areas of moderate or severe water infiltration, apply the Sika®-4a cement paste in such a way that the water is concentrated at the points of greatest infiltration as indicated in Diagram .1below.



Sealing and Channelling Water Infiltration's

The holes formed at the points of greatest infiltration may need to be enlarged to a suitable size to allow for the insertion of short lengths of plastic or rubber tubing set in Sika®-4a cement paste as shown in Diagram 1. These discharge pipes relieve the pressure on the surrounding cement paste until it is completely cured.

When the preliminary waterproofing has completely cured, usually after a minimum of 24 hours, the discharge tubes are removed and the resulting holes plugged with Sika®-4a cement paste or, if the pressure is severe, with Sika®-2 cement paste (see corresponding Product Data Sheet). Form the paste, by gloved hand, into a tapered plug and place it immediately into the hole, pressing it firmly for 15 to 45 seconds until initial set has occurred.

Cleaning of Tools

Remove uncured material from tools and equipment with water. Cured material can only be removed mechanically.

Notes on Application / Limits

Allow the Sika®-4a cement paste to cure for 4 to 6 hours before over coating.

Only use fresh Portland cement.

Sika®-4a preliminary waterproofing and plugs must always be protected with a waterproof layer of Sika®-1Render System.

Curing Details

Curing Treatment

Good concrete curing practise is recommended.

Local Restrictions

Please note that as a result of specific local regulations the performances of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

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