

PRODUCT DATA SHEET

Sika[®]-4a

RAPID SETTING WATERPROOFING ADMIXTURE

DESCRIPTION

Sika[®]-4a is a rapid setting waterproofing admixture. When mixed with ordinary Portland cement and water, it sets rapidly to seal areas of severe water infiltration through concrete, rock or masonry.

USES

Can be used universally in building and civil engineering for:

- Surface pre-plugging in the presence of water infiltration on rock or concrete surfaces
- Clogging of cracks, joints and gravel nests that lead to water ingress

- Manufacture of quick-setting mortar for assembly work (laying of rungs, screws, bolts and sealing lugs; laying of frames, shafts and covers of all kinds)
- Manufacture of quick-setting mortar for repair work in gutters and wells containing water, etc.

FEATURES

- Causes rapid setting and subsequent hardening of the cement
- Depending on the type of cement, the temperature of the support, air and water, variations in the setting behavior are possible, in general setting begins after 15 to 50 seconds.
- Contains no chlorides, is solvent-free and non-flammable

PRODUCT INFORMATION

Composition	Aqueous solution of inorganic active substances	
Packaging	5 kg, 15 kg	
Shelf life	In original unopened packaging: 18 months from production date	
Storage conditions	Storage temperature between +5 °C and +35 °C. Protect from direct influence of sunlight and frost.	
Appearance and colour	Colourless	
	Homogeneous	
Density	~ 1.25 kg/l.	(Relative density at +20 °C)
Viscosity	< 10 MPAs	(+20°C)
pH-Value	12.0	
Total chloride ion content	≤ 0.1 %	

APPLICATION INFORMATION

Recommended dosage	Sika®-4a: Mixing water: Cement: Mixing water:	<u>1: 1 to 1: 4, depending on the user</u> ~ 3: 1
Ambient air temperature	Min. +5 °C, max. +35 °C	
Substrate temperature	Min. +5 °C, max. +35 °C	

BASIS OF PRODUCT DATA

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

IMPORTANT CONSIDERATIONS

When handling Sika®-4a, it is necessary to wear protective clothing, rubber gloves and goggles.

Use only with traditional Portland cement.

The setting speed and hardening depend on the temperature of the air and water as well as the cement used.

For major construction projects, please contact the technical sales consultant of Sika Schweiz AG.

It is recommended to carry out preliminary tests with different mixing ratios of (Sika®-4a: Water as well as cement: Mixing solution).

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

The support, rock or concrete, must be cleaned cleanly, roughened and sufficiently stable. Loose parts must be removed and protruding rock tips equalized.

It may be necessary to widen the cracks in order to obtain sufficient adhesion on the sides of the crack.

MIXING

Mix Sika®-4a with clean water at the desired dilution.

Place this mixing solution in the mixing vessel.

Quickly sprinkle the cement until the liquid is covered.

Mix the cement intensively with the mixing solution until a homogeneous paste is obtained.

Use cement paste immediately.

Prepare only quantities that can be used before taking. Depending on the temperature and the type of cement, the onset of setting is about 15 to 50 seconds).

Cement paste that is stirred or processed after the setting process has begun is unusable.

APPLICATION METHOD / TOOLS

Shape by hand (use rubber gloves!) The cement paste Sika®-4a into a plug and press it immediately and firmly into the hole until the mortar is set.

In areas where water infiltration is medium to high, the accumulated water must be compressed in certain places by pre-compressing it with Sika®-4a cement paste. This escaping water is captured and purged in a targeted manner by rubber discharge pipes fixed with the cement paste (approx. 24 hours). After removing the rubber hose, the concentrated water outlet is plugged with Sika®-4a cement paste.

In case of very high water pressures, it may be necessary to enlarge the prepared area around the discharge pipes in order to obtain a sufficiently large adhesion surface for the Sika®-4a cement paste.

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 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.

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PRODUCT DATA SHEET

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