

Sika[®] 1

Permeability Reducing Admixture

Construction

Description	Sika [®] 1 is a liquid admixture that reduces the rate at which water can penetrate into or through concrete and mortar. When added to the mix it reacts with the constituents to block the pores and capillaries. Whilst the passage of water is significantly reduced or stopped Sika 1 still allows the substrate to breathe.
Uses	Sika [®] 1 can be used in concrete, mortars and grouts in the following applications. <ul style="list-style-type: none"> ▪ Tunnels, basements. ▪ Culverts, canals. ▪ Water tanks, reservoirs. ▪ Swimming pools. ▪ Plaster rendering.
Advantages	<ul style="list-style-type: none"> ▪ Sika[®] 1 is part of an international range of proven admixtures. ▪ Sika[®] 1 is not a vapour barrier, the substrate is still able to breathe. ▪ Sika[®] 1 is an economical aid for improving the water tightness of concrete and mortar.
Storage and Shelf Life	Stored at temperatures between 5°C and 35°C in unopened original containers, protected from direct sunlight and frost, shelf life is at least one (1) year. If settlement occurs within this period, stir vigorously before use, in bulk continuous agitation is required.
Instructions for Use	
Dosage	Standard dosage of 9 litres/m ³ is usually recommended with a minimum cementitious content of 320kg/m ³ . Mortar and Grouts - add to batch water at a rate of 1 part Sika [®] 1 to 8 parts water (for wet sand increase dosage ratio to 1:6)
Mixing	For pre-mix concrete Sika [®] 1 is added at the batching plant by dispensing directly into the mixing water. For on site batching of concrete or mortar dilute Sika [®] 1 with the mixing water in accordance with the stated dosage rate. This dilution is best carried out by first mixing an equal volume of Sika [®] 1 with water and then adding the remaining water.
Specification Type	Sika [®] 1 is currently being tested for AS 1478.1-2000 as (SN).

Technical Data (Typical)

Form	Viscous
Colour	Yellow
Density (20°C)	1.05 kg/litre approx.
pH Value (20°C)	10 ± 1.0
Chloride Content	No added chlorides
TEA Content	Contains TEA
Air entrainment	Does not affect air content
Suitability	Can be used in most types of concrete and mortar containing ordinary Portland cement.
Compatibility	Can be used in conjunction with other Sika admixtures.
Packaging	20 litre drum 205 litre drum Bulk deliveries (must be continuously agitated)

Important Notes

- As with all concrete and mortars, it is essential to protect mixes containing Sika[®] 1 from water evaporation during the crucial early age curing period. We recommend the use of Antisol curing membranes for this purpose. Refer to the Antisol Technical Data Sheet for further information.
- Sika[®] 1 is an economical pore and capillary filler for improving water tightness of concrete and mortars. In difficult and demanding situations it may be necessary for Sika[®] 1 to be used in conjunction with other Sika admixtures and products.
- Careful attention must be paid to the waterproofing details of joints in concrete and mortar.
- If completely waterproof or water tight concrete is required please contact Sika's Technical Department for the most suitable recommendations.

Handling Precautions

- Avoid contact with skin and eyes.
- Wear protective gloves and eye protection during work.
- If skin contact occurs, wash skin thoroughly.
- If in eyes, hold eyes open, flood with warm water and seek medical attention without delay.
- A full Material Safety Data Sheet is available from Sika on request.

Important Notification

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 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 proprietary rights of third parties must be observed. All orders are accepted subject to our current terms and conditions of sale. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.

