

# PRODUCT DATA SHEET

## Sika®-1 S Plus

### PREMIUM INTEGRAL CONCRETE ADMIXTURE

#### DESCRIPTION

Sika®-1 S Plus is a 2 component waterproofing admixture for mortar and concrete. It is a special mix of pore-blocking hydrophobic admixture and chemicals that can form crystalline structures within the pores and capillary tracts of the concrete. It effectively waterproofs the concrete against groundwater penetration from any direction, protecting against waterborne salts and eliminating concrete decay.

#### USES

Sika®-1 S Plus 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

Waterproof facilities and structures, e.g:

- Underground structures
- Utility vaults
- Tunnels
- Foundations, piles, and pile caps

#### CHARACTERISTICS / ADVANTAGES

Sika®-1 S Plus has the following properties:

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

#### PRODUCT INFORMATION

<b>Packaging</b>	200 Ltr drum / 1000 Ltr IBC (Liquid) 25 kg bag (Powder)	
<b>Shelf Life</b>	12 months shelf life from date of production if stored properly in undamaged, unopened, original sealed packaging.	
<b>Storage Conditions</b>	Storage at temperatures between 5 °C and 30 °C. Protect from direct sunlight, frost and contamination.	
<b>Appearance / Colour</b>	Liquid Powder	Colourless to light yellow liquid White powder
<b>Density</b>	Liquid	0.83 ± 0.05 g/cm <sup>3</sup>

# TECHNICAL INFORMATION

## Indicative performance of mortar mix

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

# APPLICATION INFORMATION

## Recommended Dosage

Liquid	Approximately 1250 mL per 100 kg of OPC
Powder	1 kg per 100kg of OPC

Powder is to be added to the concrete during the batching process. For ready mix plant batching, powder added directly into the mixing drum and batch in accordance with standard practices.

Note: Trial mixes should always be conducted to establish the exact dosage rates and water requirements per mix.

## 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.

## 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

### MIXING

For best water absorption result, keep the concrete water/cement ratio at 0.35 or below and design mix should include silica fume for better waterproofing performance. In all cases, total quantity of water to be added in the design mix should take into consideration the amount of moisture from aggregate and sand on site

### APPLICATION METHOD / TOOLS

The standard rules of good concreting practice (concerning production, placing, and curing) are to be followed. Refer to relevant standards.

Sika®-1 S Plus may be combined with many other Sika® products.

Note: Preliminary testing is required to prove the compatibility. Please contact Sika technical service for more information and advice.

#### Sika (Singapore) Pte Ltd.

28 Tuas South Ave 8  
Singapore 637648  
Phone: +65 6861 0632  
Fax: +65 6862 3915  
Email: sales@sg.sika.com  
www.sika.com.sg



## 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.

Sika-1SPlus-en-SG-(10-2022)-1-1.pdf

### Product Data Sheet

Sika®-1 S Plus

October 2022, Version 01.01  
020705040010000064

