

# BUILDING PRODUCT INFORMATION SHEET

## SikaPlast<sup>®</sup>-100 S

### MID-RANGE WATER REDUCING CONCRETE ADMIXTURE

#### DESCRIPTION

SikaPlast<sup>®</sup>-100 S is a mid-range water reducer specifically formulated to produce concrete with improved water reduction and extended slump life.

#### USES

- SikaPlast<sup>®</sup>-100 S is used to produce workable concrete with a lower total water content and should be considered wherever high quality concrete is required
- SikaPlast<sup>®</sup>-100 S is ideal whenever the various handling properties of concrete must be improved and where placing conditions are difficult
- SikaPlast<sup>®</sup>-100 S is used with all grades of concrete.

#### FEATURES

Mix designs incorporating SikaPlast<sup>®</sup>-100 S can show economies through cement reduction, whilst still improving the plastic and hardened properties of the concrete. Batching water is reduced without loss of workability. Typical performance advantages are:

- Increased strength and long term durability properties
- Reduced dimensions of long term shrinkage and creep
- Improved surface finish
- Placing in difficult situations is made easier
- Improved characteristics of concrete with difficult and harsh aggregate or sands

#### PRODUCT INFORMATION

<b>Product identifier</b>	SikaPlast <sup>®</sup> -100 S
<b>Place of manufacture</b>	Aotearoa New Zealand
<b>Composition</b>	Aqueous solution
<b>Packaging</b>	200 litres, bulk delivery
<b>Shelf life</b>	Twelve (12) months from date of manufacture when stored as stated.
<b>Storage conditions</b>	Store in unopened, original containers free from frost and at temperatures between +5° and +35°C.
<b>Appearance and colour</b>	Orange liquid
<b>Specific gravity</b>	~ 1.05 kg/litre
<b>Total chloride ion content</b>	No added chlorides

#### TECHNICAL INFORMATION

<b>Specific advice</b>	<ul style="list-style-type: none"><li>▪ <b>Air entrainment:</b> May have slight increase, tests are recommended</li><li>▪ <b>Water reduction:</b> Yes</li><li>▪ <b>Effect on setting time:</b> Up to 600 ml / 100 kg setting time is within 1 hour of control</li><li>▪ <b>Freezing point:</b> - 5°C</li><li>▪ <b>Suitability:</b> All types of Portland cements, including sulphate resistant cement</li></ul>
------------------------	---

## APPLICATION INFORMATION

<b>Recommended dosage</b>	<b>Dosage:</b> 400 - 800 ml <b>Typical Dosage:</b> 600 ml / 100 kg Trial mixes are recommended to establish exact dosage rates required to suit individual requirements. If assistance is required please contact the Sika Technical Department.
<b>Compatibility</b>	Compatibility with other Sika Admixtures - yes, but add separately (do not pre-mix).
<b>Dispensing</b>	<ul style="list-style-type: none"><li>■ SikaPlast®-100 S is generally added to the initial batching water, prior to the addition of aggregates</li><li>■ For best results delay the dosage into the water until the cement and air entraining admixtures have been added and initially mixed with water</li><li>■ SikaPlast®-100 S may be added to the mixed concrete if required, however, further mixing should take place for at least five minutes.</li></ul>

## MANUFACTURER AND IMPORTER INFORMATION

<b>Manufacturer information</b>	Address	Sika (NZ) Limited 85-91 Patiki Road Avondale, Auckland 1026 New Zealand
	Phone number	0800 745 269
	Website	<a href="https://nzl.sika.com/">https://nzl.sika.com/</a>
	Email address	info@nz.sika.com
	NZBN	9429000018791

## BUILDING CODE INFORMATION

<b>Building Code clauses</b>	<p>Note: This product on its own is not within the scope of the NZ Building Code. It is an additive / admixture for use in the manufacture of concrete, to enhance its performance properties in either its plastic or hardened state. When added to concrete that must comply with the NZ Building Code, and it used in accordance with Sika's technical literature, it will contribute to meeting the requirements of the following clauses:</p> <p>B1 Structure: Performance Clauses B1.3.1, B1.3.2, B1.3.3 (a, b, f, h, m, q) B1.3.4</p> <p>B2 Durability: Performance clause B2.3.1-(a) not less than 50 years</p> <p>F2 Hazardous Building Materials: Performance clause F2.3.1</p>
<b>Building Code compliance statements</b>	<p>Performance B1.3.1, B1.3.2, B1.3.3 (a, b, f, h, m, q), B1.3.4: This product meets the requirements of AS1478.1 Chemical Admixtures for Concrete, Mortar and Grout. When added to concrete during the production phase it contributes to the hardened concrete meeting loading requirements arising from self-weight, imposed gravity loads, earthquake, wind impact, and the effects of creep and shrinkage over time.</p> <p>Performance B2.3.1 (a) 50 years: This product meets the requirements of AS1478.1 Chemical Admixtures for Concrete, Mortar and Grout. When added to concrete, mortar or grout during the manufacturing process it helps the hardened concrete to achieve its durability requirements and to remain serviceable for 50 years, or more. According to Sika's "Service Improvement" records, maintained within its ISO9001:2015 Quality Management System, this product has performed successfully since it was introduced in 2016.</p> <p>Performance F2.3.1: This product meets this requirement when used and applied in accordance with Sika's installation instructions and does not present a health hazard to people occupying or using the building. Refer to the Sika Product Technical Data sheet and product Safety Data Sheet <a href="http://nzl.sika.com">nzl.sika.com</a> for further information if required</p>

## BASIS OF PRODUCT DATA

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

### NZ BUILDING PRODUCT INFORMATION SHEET

SikaPlast®-100 S  
12/12/2024 File version 1.0  
021301011000003467

## IMPORTANT CONSIDERATIONS

- As with all concrete, it is essential to protect mixes containing SikaPlast®-100 S from water evaporation during the crucial early age curing period. We recommend the use of Sika® Antisol curing membranes for this purpose. Refer to the Sika® Antisol product data sheet for further information
- To avoid moisture evaporation from the concrete surface during the finishing period Sika recommends the use of Sika® Film (refer to Sika® Film product data sheet)
- When using SikaPlast®-100 S in concrete containing air entraining admixtures, dosages of the latter may need to be adjusted to maintain the same target level of air entrainment.
- For additional information, please contact your local Sika Representative.

## 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

### DESIGN REQUIREMENTS

Design requirements for concrete that contains Sika admixtures, or other concrete additives are the responsibility of the ready mixed concrete producer and/or the concrete design engineer.

### MAINTENANCE REQUIREMENTS

Once added the Sika admixture / additive becomes an integral part of the hardened concrete, mortar or grout. Refer to the supplier of that product for their maintenance instructions.

## 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 the 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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

The building product/building product line is not subject to warning or ban under section 26 of the Building Act 2004.

### Sika (NZ) Limited

85-91 Patiki Road  
Avondale, Auckland 1026  
New Zealand  
0800 745 269  
www.sika.co.nz

### NZ BUILDING PRODUCT INFORMATION SHEET

SikaPlast®-100 S  
12/12/2024 File version 1.0  
021301011000003467

NZBPIS-190825-7502-7502-en-GB-1.0