

**BUILDING TRUST** 

# BUILDING PRODUCT INFORMATION SHEET Sika Retarder® N

# Set Retarder

#### DESCRIPTION

Sika Retarder<sup>®</sup> N is used to retard the setting time of the concrete to allow concreting under conditions of high ambient temperatures and placing of mass concrete. It is designed to be used for pumped, prestressed and structural concrete.

#### USES

- Increases the setting time of concrete
- Used in high temperatures
- Excellent for large concrete pours

**PRODUCT INFORMATION** 

#### **FEATURES**

- Minimises the risk of cold joints.
- After the initial retardation, the rate of hardening proceeds at a rate equivalent to, or greater than, unretarded normal concrete.
- Delivery of concrete can be made over long distances from the premix concrete plant.

# **APPROVALS / CERTIFICATES**

Sika Retarder<sup>®</sup> N meets and exceeds all requirements of Australian Standard 1478.1-2000 for Set-Retarding Admixture (Re)

Product identifier	Sika Retarder® N	
Place of manufacture	Aotearoa New Zealand	
Composition	Aqueous solution of selected carbohydrates	
Packaging	Bulk deliveries	
	1000 litre IBC	
	200 litre drum	
	20 litre container	
Shelf life	Twelve (12) months when stored in original unopened containers, protected from direct sunlight and frost at temperatures between 5°C and 35°C.	
Storage conditions	Store at temperatures between +5°C and +35°C, protected from direct sunlight.	
Appearance and colour	Yellow liquid	
Specific gravity	1.05 gr/cm <sup>3</sup> approx.	

Recommended dosage	The effect of Sika Retarder <sup>®</sup> N depends on a number of factors such as cement type, ambient tem- perature and mix design. The optimum dosage should be determined by site or laboratory tests with the particular concrete mix design.
	The rate of addition is generally in the range of: $200 \text{ml} \pm 100 \text{ml}$ per $100 \text{kg}$ of cementitious materials.
	Note: For dose rates higher than 400 ml/100kg please refer to your Sika representative.

Sika Retarder<sup>®</sup> N should be added during the concrete mixing process at the same time as the mixing water.

#### **TECHNICAL INFORMATION**

Concreting guidance	Concrete should be placed according to good concrete practice and proper curing procedures should take place
Specific advice	May slightly increase air content when used with water reducers.

#### MANUFACTURER AND IMPORTER INFORMATION

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

#### **BUILDING CODE INFORMATION**

Building Code clauses	Note: This product on its own is not within the scope of the NZ Building Code. It is an additive / ad- mixture 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:
	B1 Structure: Performance Clauses B1.3.1, B1.3.2, B1.3.3 (a, b, f, h, m, q) B1.3.4 B2 Durability: Performance clause B2.3.1-(a) not less than 50 years
	F2 Hazardous Building Materials: Performance clause F2.3.1
Building Code compliance state- ments	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.
	Performance B2.3.1 (a) 50 years: This product meets the requirements of AS1478.1 Chemical Admix- tures for Concrete, Mortar and Grout. When added to concrete, mortar or grout during the manufac- turing 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 2020.
	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 nzl.sika.com for further information if required
SYSTEM INFORMATION	 

Compatibility

Sika Retarder $^{\circ}$  N is compatible with all the types of Portland cement .

When using with other admixtures, check their compatibility first.

### **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.

#### IMPORTANT CONSIDERATIONS

Increase in dosage rate will cause an increase in the setting time. If this occurs, do not change to an accelerator. A severe overdose may delay the setting time of the concrete to a detrimental extent.

# **Jika**®

#### NZ BUILDING PRODUCT INFORMATION SHEET

Sika Retarder® N 12/12/2024 File version 1.0 021406011000000051

## 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.

# 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

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NZ BUILDING PRODUCT INFORMATION SHEET

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