

## PRODUCT DATA SHEET

# Sika® ViscoCrete®-5-555 (NZ)

### SUPERPLASTICISER FOR CONCRETE AND MORTAR

#### DESCRIPTION

Sika® ViscoCrete®-5-555 (NZ) is a third generation polymer-based ultra-high range superplasticiser for ready mix and precast concrete.

#### USES

Sika® ViscoCrete®-5-555 (NZ) is suitable for use as a superplasticiser for the production of concrete where extreme water reduction, excellent flowability and optimal cohesion are required. Sika® ViscoCrete®-5-555 (NZ) is ideal to use in the following types of concrete:

- Precast concrete
- High strength concrete
- Placing of concrete where steel congestion is a problem
- Placing of concrete where high flowability is important
- Placing of concrete without vibration or mechanical compaction (SCC - Self Compacting Concrete)

#### CHARACTERISTICS / ADVANTAGES

Concrete containing Sika® ViscoCrete®-5-555 (NZ) has the following advantages:

- Extremely high water reduction - up to 40%
  - High early strength development
  - High density and high ultimate strengths
  - Extended slump life (60mins + depending on ambient temperatures and other influencing factors).
- Self-Compacting Concrete:
- Excellent flowability resulting in easier placing
  - No vibration required resulting in better compaction
  - Excellent cohesion without segregation.

#### APPROVALS / STANDARDS

Sika® ViscoCrete®-5-555 (NZ) meets and exceeds all requirements of Australian Standard 1478.1-2000 for High Range Water Reducer Type (HWR).

#### PRODUCT INFORMATION

Chemical Base	Light blue aqueous solution of modified polycarboxylate
Packaging	20 litre and 200 litre drums, and bulk delivery
Appearance / Colour	Light blue liquid
Shelf Life	Twelve (12) months when stored as stated.
Storage Conditions	Store in unopened, original containers, protected from sunlight and stored at temperatures between +5°C and +35°C. If frozen, thaw and agitate thoroughly to return to normal state.
Density	Approx 1.11 kg/litre
Total Chloride Ion Content	No added chlorides

#### APPLICATION INFORMATION

Recommended Dosage	<p><b>For soft / plastic concrete:</b> 150 - 400 mls/100 kg cement</p> <p><b>For high slump and self-compacting concrete:</b> 400 - 800 mls/100 kg ce-</p>
--------------------	--

ment

**Water reduction:** up to 40%.

**Effect on setting time:** High dosages may retard the set times.

Refer to "Important Considerations" section for further information.

---

**Compatibility**

Suitable for use with all types of Portland cements. Sika® ViscoCrete®-5-555 (NZ) is highly effective as a single admixture or in combination with other admixtures in the Sika System - trials are recommended first. Always add separately, do not premix. Please contact a Sika representative for further information.

---

**Dispensing**

Sika® ViscoCrete®-5-555 (NZ) can be added directly to the initial batching water. The addition of the balance of the batching water to adjust concrete consistency should only be done after a minimum of 2/3 of the wet mixing time to avoid surplus water in the concrete. Sika® ViscoCrete®-5-555 (NZ) may also be added to mixed concrete in ready mix trucks if necessary. For best water reduction we recommend a minimum wet mixing time of 6 minutes.

---

## LIMITATIONS

- Dosages are given as a guide only and actual doses for any mix design will need to be confirmed with trials by the concrete plant engineer to establish suitability for the intended purpose of the concrete
- Sika® ViscoCrete®-5-555 (NZ) can be used in conjunction with the following Sika products (trials are recommended before use): SikaPump®, SikaRapid®, Sika® Retarder, Sika® Ferrogard®-901 S, Sika®-1+, SikaControl®-40 (NZ), Sika® Stabilizer-4 R.
- Sika® ViscoCrete®-5-555 (NZ) is compatible with Sika® Plastocrete®, Sika® Plastiment® and SikaPlast® admixtures.
- For self-compacting concrete it is necessary for concrete mixes to be designed to specifically satisfy the required flow and cohesive characteristics (contact our Sika Technical Department)
- When using high doses of Sika® ViscoCrete®-5-555 (NZ), the air content of the concrete must be checked at the plant and at the site for each individual project
- As with all concretes it is essential to protect mixes containing Sika® ViscoCrete®-5-555 (NZ) from water evaporation during the crucial early age curing period. We recommend the use of Antisol curing membranes for this purpose. Refer to the separate Sika Antisol data sheet for further information
- Air entrainment must be checked and adjusted when using Sika® ViscoCrete®-5-555 (NZ) in combination with Sika® Air Mix or Sika® Ae 200

## 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.

## 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.

## 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.

## 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.

### Sika (NZ) Limited

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



### Product Data Sheet

Sika® ViscoCrete®-5-555 (NZ)  
November 2019, Version 04.01  
021301011000001247

SikaViscoCrete-5-555NZ-en-NZ-(11-2019)-4-1.pdf