

**BUILDING TRUST** 

# PRODUCT DATA SHEET SikaControl® PLUS

## SHRINKAGE-REDUCING ADMIXTURE

#### DESCRIPTION

SikaControl<sup>®</sup> PLUS is a shrinkage-reducing admixture used to produce high performance concrete with greatly reduced drying shrinkage.

#### USES

- In premixed and precast concrete elements to reduce the drying shrinkage of the concrete.
- In thin bonded topping slabs, to minimise the difference in shrinkage between the new topping and the existing substrate.
- In concrete elements which are restrained against shrinkage.
- For durable concrete in marine environments.
- For watertight concrete in reservoirs, sewage treatment plants, dams.

## **CHARACTERISTICS / ADVANTAGES**

- Reduced drying shrinkage.
- Reduction in the potential for drying shrinkage cracking.
- Reduces the potential for slab curling.
- Substantially reduces the occurrence of drying shrinkage cracks and therefore reduces permeability, resulting in improved concrete durability.

# **APPROVALS / STANDARDS**

SikaControl<sup>®</sup> PLUS meets and exceeds all requirements of Australian Standard 1478.1-2000 as Special Purpose Admixture Type (SN).

| Chemical Base       | Liquid hydroxyl combinations  |
|---------------------|---|
| Packaging           | 205 liter drum, 10 liter container  |
| Appearance / Colour | Colourless liquid   |
| Shelf Life          | Shelf life is at least one (1) year when stored in unopened original container.   |
| Storage Conditions  | Store at temperatures between 5°C and 35°C, protected from direct sunlight.   |
| Specific Gravity    | 0.98 g/cm <sup>3</sup>  |
| Recommended Dosage  | Typical dosage rate is 1.0 – 4.0% by weight of total cementitious material.<br>Optimum dosage depends on specified requirements, mix ingredients and<br>required plastic and hardened properties.<br>Laboratory and/or field trials are essential in determining the optimum<br>dosage. |

**PRODUCT INFORMATION** 

Product Data Sheet SikaControl® PLUS April 2019, Version 01.01 021403041000000012 Dispensing

SikaControl<sup>®</sup> PLUS is compatible with other Sika Concrete admixtures, however, they must be added separately. Do not pre-mix SikaControl<sup>®</sup> PLUS with other admixtures, and always conduct trials to test compatibility.

The required dosage of SikaControl<sup>®</sup> PLUS should be added to the concrete at the batching plant, with the gauging water or poured into the concrete simultaneously with the gauging water. It may also be added into the transit mixer at the point of discharge, but an additional mixing time of 60 seconds/m<sup>3</sup> is required and the concrete should be visually checked for uniform consistency.

#### LIMITATIONS

- May retard concrete at lower temperatures
- When using SikaControl® PLUS, plant and site trials are always recommended to verify the performance and handling characteristics of the design concrete mix.
- SikaControl<sup>®</sup> PLUS will reduce drying shrinkage. It will not eliminate cracking. The reduction of cracking is dependant on good engineering design, that allows for concrete shrinkage by incorporating well designed and properly located shrinkage control joints.
- It is essential to protect the concrete from water evaporation during the crucial early age period. We recommend the use of Sika<sup>®</sup> Film evaporation retardant and Antisol curing compounds for this purpose. Refer to the Technical Data Sheets for information.

# **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.

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# 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.



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