

PRODUCT DATA SHEET

Sika® ViscoCrete®-2100 (NZ)

HIGH PERFORMANCE SUPERPLASTICISER FOR CONCRETE

DESCRIPTION

Sika® ViscoCrete®-2100 (NZ) is a third generation polymer-based ultra-high range superplasticiser combined with strength accelerating components, that results in high early strength.

USES

Sika® ViscoCrete®-2100 (NZ) is suitable for concrete mixes which require high early strength development. Sika® ViscoCrete®-2100 (NZ) is mainly used for the following applications:

- Precast concrete
- In situ concrete requiring fast stripping times
- Self compacting concrete
- Prestressed concrete where early release of stressing cables is necessary
- Ready mix concrete where minimum time delays are critical e.g. plant/factory shutdown
- In colder temperatures where accelerated strength development is necessary
- As a substitute for rapid hardening cement
- In tidal situations where wave action may damage fresh concrete.

CHARACTERISTICS / ADVANTAGES

Concrete containing Sika® ViscoCrete®-2100 (NZ) has the following advantages:

- High density and high strength
- Pronounced increase in early strength development resulting in early stripping times for precast and in situ concrete
- Reduced energy costs due to reduction in use of steam curing systems
- Reduced closure times for repairs of roads and runways

PRODUCT INFORMATION

Chemical Base	Aqueous solution of modified polycarboxylate and strength accelerators
Packaging	20 litre pails, 200 litre drums or bulk delivery
Appearance / Colour	Cloudy brown liquid
Shelf Life	Twelve (12) months from date of manufacture when stored as stated.
Storage Conditions	Store in unopened original containers protected from direct sunlight and frost at temperatures between +5°C and +35°C.
Density	~ 1.1 kg/litre
pH-Value	~ 8.0

APPLICATION INFORMATION

Recommended Dosage

0.5 - 1.5% by weight of cement

Note: Dose rate will affect workability, setting time, early and ultimate strength. Trials are recommended to determine the dose rate for each application.

Compatibility

Compatible with other Sika Admixtures, but add separately. Do not premix.

APPLICATION INSTRUCTIONS

DISPENSING

MIXING

- Sika® ViscoCrete®-2100 (NZ) is added to the concrete immediately prior to pouring
- To optimize the water reducing effect, mixes containing Sika® ViscoCrete®-2100 (NZ) require extended mixing times (minimum 5 minutes)
- With higher dose rates, water content of the concrete should be reduced to avoid segregation

FURTHER DOCUMENTS

Air entrainment: Nil

Water reduction: Up to 30%

LIMITATIONS

- Sika® ViscoCrete®-2100 (NZ) can be used in conjunction with the following Sika products (trials are recommended): SikaPump, SikaRapid, Sika Retarder, Sika Ferrogard-901, Sika Stabilizer-4 R
- The air content must be checked on each individual mix
- As with all concrete it is essential to protect mixes containing Sika® ViscoCrete®-2100 (NZ) from water evaporation during placement and the crucial early age curing period. We recommend the use of Sika-Film evaporation retardant and Sika Antisol curing membranes for this purpose (refer to the separate SikaFilm and Sika Antisol data sheets for further 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.

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.

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