Construction

Sikaset® N

Hardening accelerating admixture

Product Description

Sikaset® N is a calcium chloride based liquid hardening accelerator for concrete and mortar.

Uses

Sikaset® N is especially suitable for any application where fast early strength development plays a major role.

Sikaset® N is mainly used for the following applications:

- Precast concrete*
- Masonry mortars for laying brick/blocks manufactured from absorbent materials such as clay, sand-line and concrete*
- Cold ambient temperatures to achieve sufficient strength gain

* Sikaset® N should not be used in reinforced and prestressed concrete structures.

Characteristics / Advantages

Sikaset® N provides the following advantages through accelerated hardening of the concrete

- Faster turnaround of formwork in precast applications
- Reduced or eliminated heat or steam curing
- Continuous concreting at low temperatures
- No negative effects on the final strengths

Sikaset® N contains chlorides which promote the corrosion of steel. It is therefore unsuitable for use in reinforced and prestressed concrete structures.

Tests

Approvals/Standards	Conforms to the requirements of BS EN 934-2 Table 7 DoP 02 14 02 02 100 0 000026 1088, certified by Factory Production Control Body 0086, Certificate 541325, and provided with the CE mark

Product Data

Form

Appearance / Colour	Pale Straw Liquid
Packaging	1000 litre IBC

Storage

Storage Conditions / Shelf Life	12 months from date of production if stored properly in undamaged unopened, original sealed packaging, in dry conditions at temperatures between +5°C and +25°C. Protect from direct sunlight and frost.

Technical Data

Chemical Base	Calcium chloride
Density	1.36 Kg/Litre
pH Value	8.0 $\pm$ 1.0
Total Chloride Ion Content % w/w	<25.5
Equivalent Sodium Oxide as % Na_2O w/w	<1.8

System Information

Application Details

Consumption / Dosage	0.8 – 2.0% by weight of cement

Application Conditions / Limitations

Compatibility	Sikaset® N may be combined with many other Sika products. Important: Always conduct trials before combining products in specific mixes and contact our Technical Service Department for information and advice about any specific combinations.

Application Instructions

Dispensing	Sikaset® N is added to the gauging water or added with it into the concrete mixer. A wet mixing time, which is depending on the mixing conditions and mixer performance, of at least 60 seconds is recommended. When added on site the truck mixer shall rotate its drum at maximum revolutions for at least 1 minute per m³ concrete and a minimum of 5 minutes to achieve a uniform mix.
Application Method / Tools	The standard rules of good concreting practice, concerning production and placing, are to be followed. Laboratory trials shall be carried out before concreting on site, especially when using a new mix design or producing new concrete components. Fresh concrete must be cured properly and curing applied as early as possible.
Cleaning of Tools	Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be removed mechanically.
Notes on Application / Limitations	When using Sikaset® N a suitable mix design has to be taken into account and local material sources shall be trialled. Sikaset® N shall not be added to dry cement. Support from our Technical Service Department is recommended. Frost: If frozen and / or if precipitation has occurred, Sikaset® N may be used after thawing slowly at room temperature followed by intensive remixing.

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Value Base

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.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet 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.

CE Labelling

EN 934-2:2009 is a candidate "harmonized" European Standard and fully takes into account the requirements of the European Commission mandate M128. Products related to concrete, mortar and grout, given under the EU Construction Products Directive (89/106/EEC) and intended to lead to CE marking.

CE-labelled as per Annex ZA.3, table ZA.2 conformity 2+ and fulfil the requirements of the given mandate of the EU Construction Products Directive (89/106/CE).

bsi. ISO 9001 Quality Management
bsi. ISO 14001 Environmental Management
bsi. OHSAS 18001 Occupational Health and Safety Management

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