

PRODUCT DATA SHEET

Sika® CNI

CORROSION INHIBITING ADMIXTURE

PRODUCT DESCRIPTION

Sika® CNI is a calcium nitrite-based corrosion inhibiting admixture containing a minimum of 30% calcium nitrite by mass. Sika® CNI meets the requirements of ASTM C1582 and ASTM C494/AASHTO M 194, Type C.

USES

Sika® CNI is designed for use in all types of conventional concrete that is exposed to chlorides from marine environments and deicing salts, as well as concrete that specifies the use of corrosion inhibiting admixtures.

Sika® CNI is also an effective accelerator where high early strength concrete is desired and the use of calcium chloride is prohibited.

Sika® CNI can be used in the production of SCC (Self-Consolidating Concrete) and conventional slump concrete, and is effective in concrete containing Portland Limestone Cement (PLC/Type IL) and supplementary cementitious materials.

CHARACTERISTICS / ADVANTAGES

Sika® CNI, when mixed in concrete, forms a passivating layer on exposed steel. This passivating layer provides corrosion protection from chlorides and other oxidative elements.

By effectively inhibiting corrosion Sika® CNI will extend the service life of steel-reinforced concrete structures.

Sika® CNI also provides:

- Accelerated setting time across a wide range of temperatures allowing earlier finishing, stripping and reuse of forms,
- Increased early and ultimate compressive and flexural strengths,
- Accelerated strength gain allowing earlier structural use and completion times.

Cold Weather Concreting: In case of freezing conditions, cold weather concreting practices in ACI 306 – Guide to Cold Weather Concreting should be followed.

Sika® CNI does not contain intentionally added chlorides.

ENVIRONMENTAL INFORMATION

Eliminates the carbon footprint of epoxy-coated reinforcing. Extends service life. Reduce or eliminate need for hot water or heated aggregates. Reduce heating forms and reduce heated enclosures.

A Manufacturer Inventory is available for Sika® CNI.

For further information, please visit:
<https://usa.sika.com/en/sustainability.html>

PRODUCT INFORMATION

Packaging	Available in 55-gallon (208-liter) drums, 275-gallon (1040-liter) totes and bulk delivery.
Shelf Life	Shelf life when stored in original packaging in dry warehouse conditions between 40°F and 80°F (5-27°C) is one year from the date of manufacture.
Storage Conditions	Sika® CNI should be stored above 20°F (-7°C). If frozen, thaw and agitate thoroughly to return to a normal state. Protect from direct sunlight.
Appearance / Color	Greenish Liquid
Specific gravity	Approx. 1.300

APPLICATION INFORMATION

Recommended Dosage	<p>The typical dosage rate of Sika® CNI for corrosion inhibiting applications will vary between 2-6 gallons per cubic yard (approx. 7-23 liters per cubic meter) of concrete. The dosage rate will vary depending on the quality of the concrete mix, the desired life cycle of the structure and the severity of the corrosion environment. In order to prevent slump loss, a set retarding admixture, hydration controlling admixture or workability retaining admixture may be required, especially in warm weather applications or when set acceleration is not desired.</p> <p>The typical dosage rate of Sika® CNI for set accelerating applications will vary between 16-120 fl oz / 100 lb. (650-7820 mL / 100 kg) of cement or cementitious materials. Various factors will affect the dosage rates. Trial mixes with the actual materials should be conducted to determine the required dosage for optimum performance.</p> <p>To the extent specialized materials are used, extreme ambient temperatures are encountered, or for other unusual project conditions, dosage rates outside the typical range may be required. For dosage rates outside the typical range, please contact your local Sika representative or the Sika Technical Services Department at 1-800-933-7452.</p>
Mixing	<p>Measure the required quantity manually or by automated dispenser. Add Sika® CNI directly into the freshly mixed concrete, or as an integral material in the batching cycle. Do NOT mix with dry cement. Sika® CNI may be dispensed on-site directly prior to placement. Care must be taken to mix thoroughly. When used in combination with other admixtures dispense each admixture separately into the mix.</p> <p>Compatibility: Sika® CNI can be used in combination with other Sika admixtures and can be successfully used in mix designs utilizing supplementary cementitious materials.</p>

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html> or by calling 1-800-933-7452.

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