**Sika® CNI**

**Corrosion inhibiting concrete admixture**

**Product Description**
Sika® CNI is a calcium nitrite based admixture designed to inhibit the corrosion of steel in reinforced concrete. Sika® CNI reacts with the reinforcing steel to form a passivating layer of ferric oxide which resists chloride attack and thus increase concrete durability.

**Uses**
As a corrosion inhibiting admixture for the following structures:
- Bridges
- Tunnels
- Retaining walls
- Industrial plants
- Marine structures
- Coastal structures
- Swimming pool etc.

**Characteristics / Advantages**
- Extends the service life of reinforced concrete structures
- Suitable for conventional reinforced concrete as well as prestressed or post tensioned concrete
- Suitable for precast concrete
- Compatible with other Sika admixtures

**Product Data**

**Form**

**Appearance / Colour**
Light yellowish clear liquid

**Packaging**
250 kg/ Bulk supply

**Storage**

**Storage Conditions / Shelf life**
12 months from date of production if stored properly in undamaged and unopened, original sealed containers at temperatures between +10°C and +40°C. Protected from direct sunlight and frost.

**Technical Data**

**Chemical Base**
Calcium Nitrite

**Density**
1.26 kg/l @ 25°C

**System Information**

**Application Details**
### Dosage

The recommended dosage rate will vary between 13 – 39 kg/m³ of concrete, depending on the severity of the corrosion environment. Sika® CNI may accelerate the setting time. In order to prevent slump loss or finishing characteristics, a set retarding admixture may be required, especially in warm weather application. The full accelerating effect of Sika® CNI may be used for cold weather concreting.

### Application Conditions / Limitations

**Application Instructions**

**Dispensing**

Measure the required quantity manually or by automated dispenser. Add Sika® CNI directly into the freshly mixed concrete at the end of the batching cycle. When used in combination with other admixtures, care must be taken to dispense each admixture separately into the mix. Mix water adjustment is necessary to account for the water in Sika® CNI and thus, maintain the required water / cementitious ratio.

**Compatibility with other admixture**

Sika® CNI can be used in combination with other Sika admixtures including SikaFume®, water reducers, superplasticisers, set retarders and air entraining agents. Sika® CNI and other admixtures have to be added separately to the concrete mix in order to deliver the results required. Preliminary trials are recommended to ensure that the optimum dosage of admixtures is used.

**Notes on Application / Limitations**

Do not allow material to dry. Resultant powder is an extreme oxidiser. Sika® CNI will not reduce the ingress of chloride or other aggressive agents.

The standard rules of good concreting practice concerning production, placing and curing are to be observed. Please refer to relevant standards.

### 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.

### 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.