# **TECHNICAL DATA SHEET**

# DCI® N

Corrosion Inhibitor

Chryso
Concrete
Solutions

#### **DESCRIPTION**

DCI® N corrosion inhibitor chemically inhibits the corrosive action of chlorides on reinforcing steel and prestressed strands in concrete. DCI® N has been specifically formulated to provide corrosion protection performance while still maintaining equivalent plastic and hardened properties of similar untreated concretes. DCI® N is a liquid added to concrete during the batching process. DCI® N contains a minimum of 30% w/w of calcium nitrite.

By chemically reacting with the reinforcing, a barrier is formed which prevents chloride penetration. Corrosion initiation is delayed, and corrosion rates are kept under control. Once corrosion has been inhibited, physical disruption of the concrete due to rust formation will not occur. When added to concrete in sufficient quantity as determined by the anticipated chloride ion content of the concrete over the design life of the structure, DCI® N maintains an active corrosion-controlling system within the concrete matrix. DCI® N complies with AS 1478.1-2000, Type SN.

### **BENEFITS**

- Prevents the corrosion of steel reinforcement in concrete
- Prolongs the durability of concrete
- Neutral set corrosion inhibitor

# **APPLICATION**

- Steel-reinforced, post-tensioned and prestressed concrete
- Concrete marine structure

# **INDICATIVE INFORMATION**

Product Nature	liquid
Color	Light brown
Lifetime	12 months
Specific gravity (kg)	1,300 ± 0,015
рН	10,90 ± 1,40

# **PACKAGING**

- Bulk
- IBC 1000L
- 205 L Drum
- Pail

# **METHOD OF USE**

#### Dosage:

Recommended dosage rates range from 10 to 25 L /  $m^3$ . The level of corrosion protection increases in proportion to the dosage. The project specification will indicate the dosage rate. In the absence of a specified dosage, or where needed to offset premixed chlorides, call your local Chryso representative.

Mix water adjustment is essential to account for the water in DCl  $^{\circ}$  N and thus maintain the desired water-cement ratio. The adjustment factor of 0.78kg of water per litre of DCl  $^{\circ}$  N is to be used. It is strongly recommended that trial mixes be made several weeks before construction start up. Contact your local Chryso representative for help with trial mixes.

#### **Equipment:**

Please contact your local Chryso representative for further information regarding the dispensing equipment for this product.

# COMPATIBILITY

- Air entrainers such as AEA<sup>®</sup> and LS AEA<sup>®</sup>
- High-range water reducers such as ADVA®
- Mid-range water reducers such as MIRA®
- Water reducers such as WRDA®
- Retarders such as Daramene®
- Each admixture must be added separately

### **PRECAUTIONS**

DCI® N freezes at approximately -15°C, but its corrosion inhibition and strength gain properties are completely restored by thawing and thorough agitation.

#### **SAFETY**

Prior to any use, please read carefully the Safety Data Sheet (SDS).

The information contained in this document is given to the best of our knowledge and is the result of extensive and controlled testing. However, it cannot under any circumstances be considered as a warranty involving our liability in the case of misuse. Tests should be con ducted before the product is used to ensure that the methods and conditions of use of the product are satisfactory. Our specialists remain at the disposal of customers if they require help with the application of the product for their specific needs.



