

## DCI® N

Corrosion Inhibitor

### 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
pH	10,90 ± 1,40

### PACKAGING

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

### SAFETY

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

### METHOD OF USE

#### Dosage :

Recommended dosage rates range from 10 to 25 L / m<sup>3</sup>. 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 pre-mixed chlorides, call your local Chryso representative.

Mix water adjustment is essential to account for the water in DCI® N and thus maintain the desired water-cement ratio. The adjustment factor of 0.78kg of water per litre of DCI® 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 Chryso®Air
- High-range water reducers such as Chryso®Adva
- Mid-range water reducers such as Chryso®Mira
- Water reducers such as Chryso®WRDA
- Retarders such as Chryso®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.