



# MegaAdd CI

Corrosion Inhibiting Admixture

**DESCRIPTION** **MegaAdd CI** is a liquid corrosion inhibiting admixture based on Calcium Nitrite. It provides an effective barrier against chloride corrosion of reinforcing steel in concrete structures thus increasing the life of the structure.

**USES** **MegaAdd CI** is used as corrosion inhibitor in concrete for piling, marine structures, structures to be treated with deicing salts, areas with high chloride contents, etc.

**ADVANTAGES**

- Provides protection for reinforcement steel
- Exhibits neutral setting time to the concrete
- Increases compressive strength
- For use in pre stressed and post-tensioned concrete

**WORKING MECHANISM** Calcium Nitrite inhibits corrosion by reacting with ferrous ions at rebar level to form a stable passive film of ferric oxide ( $Fe_2O_3$ ) on the reinforcement steel, around the anode. Calcium Nitrite promotes the stabilization of the passive layer of oxide normally found on the reinforcing steel in concrete. Its protective mechanism works through repairing the defects that usually occur in the oxide structure, thus preventing chloride ions from penetrating the pure ion of metal. The induced barrier is insoluble and after determining the chloride content, the Structural Engineer can specify the appropriate amount of **MegaAdd CI** that should be added to ensure the structural integrity of concrete.

## TYPICAL PROPERTIES at 25°C

PROPERTY	TEST METHOD	VALUE
Component	-	Single
Form	-	Liquid
Colour	-	Pale Yellow
Specific Gravity	ASTM C494	1.26 +/- 0.02
Air Entrainment	ASTM C231	Up to 1% over Control Mix
Chloride Content	BSEN 480-10	Nil to BSEN 934-2
pH	ASTM C494	7 - 9
Calcium Nitrite	-	Min 30%

**COMPATIBILITY** **MegaAdd CI** can be used with all types of cements and cementitious materials like GGBS, fly ash, micro silica, it is also compatible for use in the SNF, ligno and PC based admixtures.

**DOSAGE** Recommended dosage is 7.0 - 25 ltr per cubic meter depending on severity of corrosive environment and chloride content of the structure. Optimum dosage of **MegaAdd CI**



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and effect on concrete properties such as workability, strength, setting time, etc. are best assessed after preliminary tests on site using the actual materials of mixes under consideration.

**EFFECT OF OVERDOSING** Overdosing may result in accelerated setting time and decrease in workability.

**PACK SIZE** 20 ltr, 200 ltr and 1000 ltr.

**DISPENSING** **MegaAdd CI** is to be directly dispensed into the mixed material. It should be the last additive to be added to avoid fast acceleration and reduction in workability.

**GENERAL INFORMATION**

<b>Shelf Life</b>	12 months from date of manufacture when stored under warehouse conditions in original unopened packing. Extreme temperature / humidity may reduce shelf life.
<b>Cleaning</b>	Clean all equipment and tools with water immediately after use.

**HEALTH and SAFETY**

<b>PPE's</b>	Gloves, goggles and suitable mask must be worn.
<b>Precautions</b>	Contact with skin, eyes etc. must be avoided. If swallowed seek medical attention immediately.
<b>Hazard</b>	Regarded as non-hazardous for transportation.
<b>Disposal</b>	Do not reuse containers. To be disposed off as per local rules and regulations.
<b>Additional Information</b>	Refer MSDS. (Available on request)

**TECHNICAL SERVICE** **CONMIX Technical Services** are available on request for onsite support to assist in the correct use of its products.



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