



for Better Quality & Durability

CORROSION INHIBITING ADMIXTURE CIA

CETEX-CIA(Corrosion Inhibiting Admixture), when added in the fresh concrete mix, inhibits the corrosion of embedded reinforcement steel and other metallic component. **It complies with ASTM-G 109.**

MECHANISM

Corrosion of reinforcing steel in concrete has always been a problem. When reinforcing steel corrodes, one of the primary substances produced is ferric oxide (rust). Rust occupies several times the initial volume of the steel. This increase in volume creates stresses within the concrete surrounding the corroding reinforcing steel. These stresses eventually cause spalling of the protective concrete cover, which may create the possibility of catastrophic structural failures. As the corrosion process accelerates, the cross-section of good reinforcing steel decreases. This increases stresses in the steel that can exceed safe limits. Typically in the alkaline environment of concrete, a passive (protective) layer (ferrous hydroxide) is formed and remains fairly stable, protecting the reinforcing steel from active corrosion. In the presence of chloride ions or carbonates, this passive layer breaks down and corrosion of the reinforcing steel is accelerated. **CETEX-CIA** reacts with the iron ions, increasing the stability of the passive layer.

USES

CETEX-CIA is used as corrosion protection agent of steel in the reinforced concrete structure both above and below ground. It is ideal for places where concrete can come in contact with seawater or ground water containing chloride salts. It must be added along with admixtures containing chloride compounds to give protection to steel from the chloride ions. Due to its properties, it is recommended for use in cementitious mix for extended life of concrete.

ADVANTAGES

- ☞ It protects the steel reinforcement of concrete from corrosion.
- ☞ This increases the life of the structure.

PROPERTIES

Type	:	Inorganic salt solution
Color	:	Yellowish
Specific Gravity	:	1.40 +/- 0.02 at 25°C
Chloride	:	Nil
pH	:	Alkaline

DOSAGE

0.25 – 2 Kgs per bag of cement. Higher dosage can accelerate the hydration process.

DIRECTION OF USE

CETEX-CIA should be added to the concrete mix during the mixing cycle after addition of water. It is recommended to allow mixing for 2-3 minutes. **Never add the admixture to the dry mix.**

PACKING

CETEX-CIA is available in 70 or 300 kg pack.

Store in frost-free condition away from heat. For best result, use within one year of opening the seal.