

Corrosion Inhibiting Admixture For Reinforcement Concrete

DESCRIPTION

SILOX CIA- 309 is a liquid corrosion-inhibiting admixture based on calcium nitrite, it is formulated to protect embedded reinforcing steel from corrosion, which helps in extending the service life of concrete structures. Does not contain calcium chloride or any chloride-based components.

USES

- Marine concrete structures, precast, prestressed, post tensioned.
- Bridges, highways
- Industrial floors exposed to aggressive environments (chemicals, deicing salts, carbonation, atmospheric attack)
- Parking garages, Concrete piers, dams, offshore platforms, piles, pillars.
- Concrete potable water structures

Advantages & Benefits

- Easy to add into the ready a batch plant.
- Good effective to Slow the rate of corrosion
- Extended service life of concrete structures.
- Effective protection from chloride induced corrosion even in different chloride concentrations.
- Has no effect on properties of hardened concrete.
- Calcium nitrite has excellent history of testing and research on the successful effectiveness as a corrosion inhibitor in concrete



Technical Data

State- Color	Brownish translucent Liquid
Density @ 25°C	1.35 ± 0.03 kg/l at 25°C
PH @ 25°C	8 ± 1
Chloride content	Nil

METHOD OF USE

- Add the correct dose of SILOX CIA- 309 at the concrete plant. For best results, it shall be added directly to freshly mixed concrete. It also be added to a ready-mix truck at the concrete plant or at a job-site.
- Minor adjustments in air entrainment may be needed to measure air content as usual at site to be sure that the air content within normal rang according to the ASTM
- Water cement ratio should be corrected by reducing the amount of water in the dosing quantity. Therefore, the mix water shall be reduced by an equivalent amount to compensate this increase. We recommend 50% to be reduced from total admixture dose.
- When used in combination with other admixtures, we must dispense each admixture into the mix separately.
- We recommend conducting site trials before finalizing the mix design.



Corrosion Inhibiting Admixture For Reinforcement Concrete

Standard Compliance

SILOX CIA- 309 Conforms to ASTM C1582 and ASTM C494 Type C

Technical Support

SILOX Technical Team are welcoming to any technical advices that our clients need and fully supporting at site to achieve best results and better concrete mix.

Dosage

Dosage rate is directly related to expected chloride exposure:

For moderate chloride content we recommend 2 - 2.5 % of cementations material each m^3

For high chloride content we recommend 3 - 3.5 % of cementations material each m^3

For sever chloride content we recommend 4% of cementations material each m^3

