

CHRYSO®CI 2005

Corrosion Inhibitor



DESCRIPTION

CHRYSO®CI 2005 is a calcium nitrite based corrosion inhibiting admixture which interacts with the structural steel in concrete to prevent chloride attack.

CHRYSO®CI 2005 chemically reacts with steel to maintain a passivating layer which when chlorides penetrate the concrete, it significantly delays the rate of corrosion.

The concrete steel reinforcements natural passivating layer may break down with the presence of water and chlorides which will result to corrosion, **CHRYSO®CI 2005** will significantly delays corrosion by repassivating the layer of the steel surface.

BENEFITS

- **CHRYSO®CI 2005** increases life of all reinforced concrete structures.
- **CHRYSO®CI 2005** chemically inhibits the corrosive action of chlorides on all reinforcing steel and pre stressing tendons.
- Offers owners, clients, Engineers and Govt bodies, a time proven corrosion inhibiting technology that will extend the service life of all reinforced concrete structures.

PACKAGING

- 210 L drum
- IBC 1000L
- Bulk delivery on request

FIELDS OF APPLICATION

When used in fresh concrete mixes, **CHRYSO®CI 2005** will seek out and form a corrosion inhibiting protective layer on steel reinforcements. Project specifications will determine addition rates, which should be pre-determined based on projected chloride-ion ingress over the life span of the structure.

- All cement types
- Precast elements
- Foundation concrete below water table
- Marine construction
- Concrete exposed to defrost salts
- Concrete in contact with water
- Concreting in aggressive environments
- etc

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Corrosion Inhibitor

Chryso
Concrete
Solutions

17/10/2024

INDICATIVE INFORMATION

Product Nature	liquid
Color	Clear to Light Yellow
Lifetime	9 months
Specific gravity	1,270 ± 0,020
pH	10,00 ± 2,00

Cl⁻ ion content: nil to EN 934 and BS 5075.

METHOD OF USE

- The optimum dosage of this product can only be established after trial tests, taking into account the rheological characteristics and the required mechanical performances of the concrete.
- It can be added: - either within mixing water, or at the end of the mixing cycle (extra mixing time) - or gradually: part in the water before mixing, part during the mixing cycle.
- Should the product be added to fresh concrete, into the mixing truck, it is necessary to mix at high speed, and then at low speed (with a minimum of 3 minutes, at each speed).
- This product may cause loss of workability which can be compensated by using an appropriate plasticizing or superplasticizing admixture.
- The project specifications will indicate the addition rate depend on chloride exposure and durability requirements. In all cases, site trials should be carried out to determine optimum results and mix design.
- Typical dosage rates range from 10 to 30 liters/m³.
- The concrete mix design should take into consideration the water available in **CHRYSO® CI 2005**.
- Because local job conditions vary, please contact your local CHRYSO sales representative for further assistance if using outside recommended dosage ranges.

PRECAUTIONS

- Protect from frost.
- Use at a temperature above 0° C.
- Should the product freeze, it will recover its properties. After thawing, an efficient agitation is necessary until the product is entirely homogeneous again.
- Protect from heat.

Compatibility:

- **CHRYSO® CI 2005** is compatible with all types of Portland cement, class C and F fly ash, GGBS, microsilica, fibers and approved air entraining admixtures.
- **CHRYSO® CI 2005** is compatible with other CHRYSO admixtures when used in the same concrete mix, but should be added to the mix separately and must not be mixed together prior to addition.

SAFETY

CHRYSO® CI 2005 is not considered dangerous to handle. Prior to any use, please read carefully the Material Safety Data Sheets.