CHRYSO®CI 553

Corrosion Inhibitor

Chryso Concrete

Solutions

7/10/2024



#### DESCRIPTION

**CHRYSO®CI 553** is a liquid admixture for steel protection, to be added into concrete. It can also be used in repair mortars and grouts.

**CHRYSO®CI 553** is composed of efficient corrosion inhibitors, combined with polyfunctional agents and a phosphonic combination made of amine salts, which increases corrosion inhibition properties.

**CHRYSO®CI 553** protects steel by a well proven, migratory inhibition function.

A unique feature of **CHRYSO<sup>®</sup>CI 553** is that the inhibitor will migrate a considerable distance through concrete to provide protection and will stop further corrosion of reinforcing metals.

#### BENEFITS

- CHRYSO<sup>®</sup>CI 553 increases life of all reinforced concrete structures.
- Effectively protects against corrosion. It even migrates into the densest of concrete and to adjoining areas to protect surrounding metal elements and provides efficient protection against carbonation and attack by atmospheric gasses such as CO<sub>2</sub>, SO<sub>2</sub>, chlorides and so on.
- CHRYSO<sup>®</sup>CI 553 is water based, organic and non-flammable, therefore safe and user friendly. It does not contain any calcium nitrite.

#### PACKAGING

- 210 L drum
- IBC 1000L

# FIELDS OF APPLICATION

In fresh concrete mixes, **CHRYSO**<sup>®</sup>**CI 553** will seek out and form a corrosion inhibiting protective layer on metals. When used with cementitious repair mortars and grouts, **CHRYSO**<sup>®</sup>**CI 553** will migrate and reach undisturbed parent concrete, providing efficient corrosion protection to rebar's which are already in place.

- 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

The information contained in this document is given to the best of our knowledge and is the result of extensive and controlled testing. However, it cannot under any circumstances be considered as a warranty involving our liability in the case of misuse. Tests should be con ducted before the product is used to ensure that the methods and conditions of use of the product are satisfactory. Our specialists remain at the disposal of customers if they require help with the application of the product for their specific needs. **www.chrysogulf.com** CHRYSO Gulf LLC, P.O. Box 22849 - Doha - QATAR Téi.:(+974) 4450 0840 Fax:(+974) 44500830 e-mail:admin@chrysogulf.com



# CHRYSO®CI 553

Corrosion Inhibitor

## **INDICATIVE INFORMATION**

Product Nature	liquid
Color	Colourless to light yellow
Lifetime	18 months
Specific gravity	0,980 ± 0,020
pН	11,00 ± 2,00

Cl<sup>-</sup> 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).
- At a high dosage, the product may generate a light set retarding effect on some cement.
- CHRYSO<sup>®</sup>CI 553 is recommended to be used at a ratio of 1.5 3.0 litres per cubic meter of concrete. Dosage rate will be dependent on concrete mix design as required by the project specifications.
- It can also be added at the same dosage rate into repair mortars and grouts.
- The concrete mix design should take into consideration the water available in CHRYSO<sup>®</sup>CI 553.
- 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.
- Store in dry ventilated conditions. Protect from heat.

#### Compatibility:

- CHRYSO<sup>®</sup>CI 553 is compatible with all types of Portland cement, class C and F fly ash, GGBS, microsilica, fibers and approved air entraining admixtures.
- CHRYSO<sup>®</sup>CI 553 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 553 is not considered dangerous to handle.

Prior to any use, please read carefully the Material Safety Data Sheets.

