

## ADITOR<sup>®</sup>Cr

### HEXAVALENT CHROMIUM REDUCING AGENTS FOR CEMENT

#### Description

The Cr (VI) present in cement is a sensitizing agent that can cause dermatitis in people handling cement pastes, mortars and concretes, which can cause different levels of injury. To avoid this, Directive 2003/53 / EC imposed on European cement manufacturers a limit of 2 ppm of Cr (VI) in their cements.

Since the presence of Cr (VI) in cement comes mainly from the oxidation of chromium present in certain materials used for their manufacture, the solution to the problem lies in the addition to the cement of an external chemical agent that can reduce the Cr (VI) - soluble - to Cr (III) - insoluble - which is then no longer absorbed by the skin.

PROQUICESA offers two different technologies which allows to solve Hexavalent Chromium issues, reducing the chrome (VI) content in cement to chrome (III), in a economical and easy way.



#### ADITOR Cr-770

##### Features

- High chemical stability, which allows to take advantage of 100% of the product, without generating waste.
- Low viscosity liquid product.
- It does not require special facilities for unloading, transfer and storage.
- It does not interfere with any of the other additives commonly used both by the cement manufacturer itself and, at a later stage, by the concrete manufacturer.

##### How to use and dosage

- It can be incorporated onto the feed material by means of a simple pumping system, being advisable to do so as close as possible to the inlet of the mill.
- The standard dose is 150ppm additive / ppm Cr (VI) to reduce.
- In any case, depending on the characteristics of the cement and the installation, and based on the objectives pursued, the ideal dose will have to be determined in each case by carrying out the appropriate industrial tests.

##### Observations

*In order to preserve the quality of the products and to ensure their proper performance, it is recommended that customers follow the guidelines that PROQUICESA provides for the application and storage of the products. Notwithstanding the foregoing, PROQUICESA guarantees only and exclusively that the products comply with the quality established in the technical sheet at the time of delivery, but the customer is and will be responsible for carrying out the proper storage and ensuring the correct application of the same.*

#### ADITOR Cr-6

##### Features

- High chemical stability, which allows to take advantage of 100% of the product, without generating waste.
- Granular solid product, easy to handle, not dusty.
- Most economical solution in cement market.
- It does not interfere with any of the other additives commonly used both by the cement manufacturer itself and, at a later stage, by the concrete manufacturer.

##### How to use and dosage

- It can be incorporated upstream the separator, so downstream the mill output, on the conveyor just before the bucket elevator, by means of a simple hopper with endless screw.
- The standard dose is 200 ppm additive / ppm Cr (VI) to reduce.
- In any case, depending on the characteristics of the cement and the installation, and based on the objectives pursued, the ideal dose will have to be