# MA.P.E./Cr 05 LV

Mapei Performance Enhancer /Cr Cr(VI) Reducing Additive

## **DESCRIPTION**

MA.P.E./Cr 05 LV is a chromate reducing agent, based on accurately selected raw materials in order to guarantee constant quality and high performance. MA.P.E./Cr 05 LV is a liquid additive which has to be added to the mill during the cement grinding process. It ensures the production of cements without Cr(VI), according to the European directive 2003/53/EC.

### **CHARACTERISTICS**

MA.P.E./Cr 05 LV guarantees, besides advantages coming from the use of a liquid product, an efficient and stable reduction of soluble chromates in cement and hydraulic binders. It is an innovative liquid product: a patented Mapei technology based on antimony compounds. During cement hydration the reducing agent acts on soluble chromates, converting Cr(VI) into Cr(III).

## **UTILISATION**

MA.P.E./Cr 05 LV can be successfully employed in cement and hydraulic binders and in general wherever it is necessary to reduce Cr(VI).

The additive must be used only during grinding, added onto the clinker conveyor belt or directly in the first chamber. In any case it should be added as close as possible to the mill entrance, avoiding long and complicated distances which could cause a loss of additive before entering the mill. It is recommended to use peristaltic dosing pumps.

MA.P.E./Cr 05 LV is particularly suitable in case of high soluble chromates content and when a long-lasting reduction of chromates is required: under normal cement storage conditions, the reducing action shall remain unchanged for at least six months.

MA.P.E./Cr 05 LV, if used at suggested dosages, does not affect negatively the properties of concrete and does not promote corrosion of reinforcing steel bar.

## **CHEMICAL-PHYSICAL DATA**

Specific gravity: 1.22 ± 0.02 g/ml (ISO 758).

For further data please refer to the appropriate safety data sheet.

#### SUGGESTED DOSAGE

Portland cements (all types): 50-55 g/t for each ppm of Cr(VI)



The dosages may be slightly different depending on mill conditions. The additive dosage, in any case, has to be optimized through a reliable industrial trial.

## **PACKAGING**

MA.P.E./Cr 05 LV is available in bulk tank trucks (full truck loads), 1200 kg IBC and iron drums (220 kg).

# **STORAGE**

MA.P.E./Cr 05 LV is a stable dispersion of antimony compounds in water. All necessary precautions must be taken so that all the storage conditions potentially affecting the stability of the suspension are carefully controlled. Avoid storage temperatures below 0°C and above 40°C.

Any dilution and contamination with other substances must strictly be avoided, with particular reference to other products for hexavalent chromium reduction (that are normally very aggressive, corrosive and characterized by a very acid pH).

If MA.P.E./Cr 05 LV is supplied in IBC, the product stability is at least eight months, if stored in the original packaging, closed firmly and stored away from direct sunlight and heat sources. Once the IBC has been opened, the product should be consumed as soon as possible as stability may be reduced. If MA.P.E./Cr 05 LV is supplied in bulk tank truck, stability is four months if stored properly. It is recommended to use suitable storage systems (preferably in HDPE).

## SAFETY INSTRUCTIONS

For further and complete information about the safe use of our product please refer to our latest version of the Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

#### WARNING

N.B. – Although the technical details and recommendations contained in this product report correspond to the best of our knowledge and experience, all the above information must, in any case, be taken as merely indicative and subject to confirmation after long-term practical applications: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in any case, the user alone is fully responsible for any consequence deriving from the use of the product.

# **REACH**

Mapei Cement Additives are fully compliant with REACH regulation

## **USTOM TARIFF**

38244000

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