MA.P.E./Cr 05

MApei Performance Enhancer/Cr 05
Cr(VI) Reducing Additive

DESCRIPTION
MA.P.E./Cr 05 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 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 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 absolutely 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).

UTILIZATION
MA.P.E./Cr 05 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.
MA.P.E./Cr 05 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.

CHEMICAL-PHYSICAL DATA
Please refer to the appropriate safety data sheets.
DOSAGE: 1.0 - 3.0 kg/t
The dosage depends on the Cr(VI) content in the cement and the grinding system. Generally speaking we suggest a dosage between 50 and 55 g/t for each ppm of Cr(VI) in the cement. The additive dosage, in any case, has to be optimised through a reliable industrial trial, preferably with the help of our Technical Assistance Group.

PACKAGING
MA.P.E./Cr 05 is available in drums, IBC tanks and in bulk tank trucks (full truck loads).

STORAGE
MA.P.E./Cr 05 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 temperatures above 40°C. MA.P.E./Cr 05 has a neutral/slightly alkaline pH: 8.0±1.5. 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 is supplied in IBC, the stability is at least eight (8) 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 is supplied in bulk tank truck, stability is four (4) months if stored properly. It is recommended to use suitable storage systems (preferably in HDPE).

DOSING SYSTEM
MA.P.E./Cr 05 can be dosed by means of membrane or peristaltic pumps.

USAGE PRECAUTIONS
The use of a liquid dispersion like MA.P.E./Cr 05 is safe, because any release of antimony dust is completely eliminated. For further information, please refer to the Safety Data Sheet and to the MA.P.E./Cr 05 safety dossier, available on request.

PRODUCT FOR PROFESSIONAL USE ONLY.

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 every 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 every case, the user alone is fully responsible for any consequences deriving from the use of the product.

REACH
Mapei Cement Additives are fully REACH-compliant.

CUSTOMS TARIF
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