



Technical data sheet

CHRYSO® AMA 40 E

A robust, early age strength
grinding aid activator

Description

CHRYSO® AMA 40 E is a robust cement grinding aid, and is therefore very forgiving in open circuit mills or closed circuit 1st generation systems. The product is specially formulated to increase the early age mechanical strengths of cement, without any loss of strengths at 28 days. When using **CHRYSO® AMA 40 E**, the chloride addition in the cement is very low. It is also formulated to improve the reactivity of the clinker, offering the choice of increased extender content or improved performance.

Advantages

- Increased 2 day mechanical strengths of the cement (from 10% – 20% at equal composition) without loss of 28 day strengths.
- Allows for fly ash and pozzalana extension and therefore decreases the percentage of clinker in cement in order to reduce CO₂ emissions and production costs.
- Increased mill production (8% to 15%) – depending on the efficiency of the equipment and the characteristics of the material to be ground.
- Reduced grinding energy costs.
- Improved efficiency in open circuit systems, at equal specific surface area or equal sieve residues.
- Significant reduction/elimination of cement agglomeration on the media, diaphragm and liners.
- Improved powder flow characteristics before, during and after storage -resulting in improved packing times and packing consistency.
- The mechanical strength of cement at all ages is increased due to improved granulometry (particle size distribution).

Physical and chemical properties

- Physical state (20°C): liquid
- Colour: brown
- Specific gravity (20°C): 1.185 (±0.010)
- pH (20°C): 7.5 to 9.5



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Application guidelines

Use

- This grinding aid is used in cement produced, according to SANS 50197 (ENV 197-1).
- **CHRYSO® AMA 40 E** is an early age strength activator that is designed for open circuit systems.

Dosage

- It is suggested that 0.3 ℓ to 1.5 ℓ of **CHRYSO® AMA 40 E** is used per tonne of fresh feed.
- Industrial trials are required to determine the optimum dosage.
- **CHRYSO® AMA 40 E** is a ready to use liquid grinding aid that may be applied onto the feed conveyor belt and as such, a dosing pump is recommended in order to introduce the correct dosage into the mill.
- Dosages in excess of 2 ℓ per tonne of fresh feed should be avoided.

Storage

- **CHRYSO® AMA 40 E** is guaranteed for 12 months starting from the manufacturing date, provided no other chemicals are added to it.
- The product should be stored away from the rain, in clean, dry tanks.
- This product will not freeze above -10°C.

Packaging

- Bulk tanker loads
- 1 000 litre containers

Health and safety

- This product is classified as corrosive.
- **CHRYSO** will provide onsite assistance, when requested.
- Refer to the material safety data sheet.

Disclaimer: The information contained in this document is given to the best of **CHRYSO's** knowledge and is the result of extensive testing. However, this document will not under any circumstances be considered as a warranty involving **CHRYSO's** liability in case of misuse. Tests should be carried out before any use of the product to ensure that the methods and conditions of use of the product are satisfactory. **CHRYSO** specialists are at the disposal of the users in order to help them with any problems encountered.

