

EUROGRIND GS 254

Cement additive for early strength



Description

EUROGRIND GS 254 is a chemical used as a cement additive (European standard EN 197, point 5.5) to improve the manufacture and the properties of the cements. EUROGRIND GS 254 is an aqueous solution of selected raw materials to suit the requirements of the cement manufacturer and factory.

Physical Properties

Appearance: Light beige liquid

Specific Gravity: 1.14 - 1.16

PH: 11-13

Recommended Addition Rate

The addition rate of EUROGRIND GS 254 is typically in the range of 0.04% of treated cement. However the optimum addition rate of EUROGRIND GS 254 depends on the characteristics of the material and the grinding circuit and is normally assessed through industrial tests. Our personnel are available for assistance. Deviation from the optimum cannot guarantee the expected results and could have an impact on the cement characteristics. Overdosing can lead to a reduction in mill retention time and a possible loss of grinding efficiency, together with “mill flushing”, excessive flow ability, as well as undesired modifications of cement properties.

Benefits

EUROGRIND GS 254 is a grinding aid for cement, which reduces the tendency of re-agglomeration of the fine particles, formed during the comminution process. EUROGRIND GS 254 permits improvements of the flow ability of the finished cement, of the efficiency of the mill and separator and thus increases the production rate with a corresponding reduction in grinding energy consumption. Cements produced with EUROGRIND

GS 254 have a lower pack-set tendency and hence can provide advantages during loading and unloading operations. EUROGRIND GS 254 improves the particle size distribution and activates the hydration kinetics, and thus increases the strength of the treated cement. The resulting enhanced performance can be used to meet specific market needs or, if desired, to reduce cement fineness and lower unit production costs, or to reduce the clinker factor, by using increased levels of supplementary cementitious material, while retaining the previous cement performance characteristics.

Advantages

- Reduced tendency of re-agglomeration
- Improved flow ability
- Lower pack set tendency
- Increased mill output
- Increased early strength
- Chloride free

Certification

EUROGRIND GS 254 meets the requirements of EN 197-1.

Typical Applications

EUROGRIND GS 254 is suitable for the grinding of most cements in all types of grinding systems, including those with ball mills, open and closed circuit, roll press, horizontal roller and vertical roller mills.

Main applications are:

- Portland cements
- Portland blended cements
- Portland composite cements

EUROGRIND GS 254 has particular benefit in the production of slag and fly ash blended cements

because of its good grinding efficiency and improvement to the early strength.

How to Use

EUROGRIND GS 254 should be added on to the feed belt or injected pure or diluted (also with the cooling water) into the mill. For an accurate proportioning of EUROGRIND GS 254 a volumetric metering pump is suitable. Alfaiha tech personnel are available for assistance.

Packaging and Storage

EUROGRIND GS 254 is supplied in 205 liter drums, in 1000 liter plastic containers or bulk. EUROGRIND GS 254 does not require particular precaution for storage. However it should be protected from freezing or excessive hot conditions. For tanks and containers placed outside in cold conditions a heating system or a re-mixing device is recommended. It is also advisable to insulate exposed pipelines. Shelf life is at least 12 months if stored in sealed manufacturer's containers.

Handling Precautions

EUROGRIND GS 254 does not require particular precaution for health and safety. For further advice please read the Material Safety Data Sheet. Accidental release or spillage to be absorbed with an inert, non-combustible material, such as sand or sawdust. Tanks and container can be cleaned with water.

Contact Information

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