

# MasterCem GA 1134

**Cement additive engineered for reduction of unit grinding energy and increase of mill throughput.**

## DESCRIPTION

MasterCem GA 1134 is a liquid, ready-to-use Grinding Aid for cement. It neutralizes the agglomeration forces between fractured crystalline cement particles that are produced during the milling process. The resulting dispersion effect improves grinding and separation efficiency, thus, promoting the development of fineness and cement powder flowability.

These benefits can be used for lowering unit grinding energy cost and for increasing mill throughput. Typical grinding efficiency improvement is in the range of 10-25% vs. plain control. However, product performance is dependent on grinding equipment characteristics, process conditions, raw material properties and cement type. To best benefit from cement additives, mill and separator process parameters may need to be adapted.

MasterCem GA 1134 improves the flow characteristics of cement with positive impact on cement conveyance and reduction of pack-set in storage silos.

## FIELDS OF APPLICATION

MasterCem GA 1134 is developed for application in the cement grinding process in:

- Ball mills (closed and open circuits)
- Vertical mills
- Other cement grinding systems

## FEATURES AND BENEFITS

MasterCem GA 1134 offers the following benefits to cement producers:

- **Cost reduction** due to lower unit grinding energy (kWh/t) and decreased specific maintenance cost. Use of low-cost energy tariffs and transfer of production to more efficient mills.
- **Capacity extension** due to higher mill throughput. Flexibility to satisfy peak market demands. Postponing or avoidance of investments for grinding capacity increase.
- **Improved cement handling** due to faster cement conveyance through the plant and in the distribution logistics. Reduction of plant stops and optimized storage in silos.

## DOSING

MasterCem GA 1134 can be metered onto the mill feed or injected into the mill. The recommended dosage rate is between 200 and 400 g per ton of cement (0.02-0.04% mass). Other dosages may be required in specific situations. The optimum dosage should be evaluated in plant trials. For further questions please consult our Technical Service.

Calibrated dosing equipment with an adjustable flow rate and appropriate dosage range is recommended to obtain the maximum performance of the product.

## COMPATIBILITY

MasterCem GA 1134 is compatible with all types of cements, including Ordinary Portland Cements and composite cements.

## STANDARDS

MasterCem GA 1134 fulfils the European cement standard EN 197.1

## PACKAGING

MasterCem GA 1134 is available in bulk, 1'000 l containers (IBC) and 208 l drums.

## STORAGE

It is recommended to store MasterCem GA 1134 at temperatures above 0°C. Pipes should be thermally isolated.

If stored in unopened containers according to manufacturer's instructions, the shelf life is a minimum of 12 months.

## HANDLING AND TRANSPORTATION

Refer to MasterCem GA 1134 Safety Data Sheet. In any case it is recommended to apply the general rules for handling of chemical products (e.g. use of gloves and goggles).

## TECHNICAL SERVICE

Master Builders Solutions assists customers in all phases of cement additives implementation in cement manufacturing. This starts with the assessment of the customer's needs and the technical limitations, continues with lab and field grinding trials, and ends with a comprehensive performance evaluation of the added value of cement additives

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Product Data	
Appearance:	Brownish liquid
Density @ 20°C:	1.200 - 1.280 g/cm <sup>3</sup>
pH-value @ 20°C:	6.0 - 8.5

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