

Product Data Sheet

CastAid CEM 805

Nov-2025, Ver. 01.01



High-Performance Quality and Early Strength Enhancer – Reduced Water Demand

DESCRIPTION

CastAid CEM 805 is a next-generation grinding additive designed to accelerate early strength development. It not only speeds up grinding in both ball mills and VRMs but also reduces cement water demand, leading to stronger concrete, lower water usage and improved workability, while maintaining efficiency and environmental friendliness.

TYPICAL USES

CastAid CEM 805 is recommended for the production of Ordinary Portland Cements (OPC) and blended cements using fly ash, GGBFS and other pozzolanic materials.

ADVANTAGES

Key advantages:

- Boost production – 10 – 20% increase in mill throughput, depending on equipment and materials
- Optimize material usage – reduce clinker by incorporating reactive supplements or non-reactive additives, lowering cost and environmental impact
- Enhance workability – improved concrete slump and mortar flowability for easier placement and finishing
- Unleash strength – 12 – 15% increase in concrete and mortar strength at all ages
- Minimize energy expenses – lower grinding energy costs by optimizing the grinding process
- Improve physical properties – superior fineness and other desirable characteristics in the ground material

STANDARDS

CastAid CEM 805 meets the requirements of ASTM C465-85.

TYPICAL PROPERTIES

Typical properties at 25°C:

Component	Single
Form	Liquid
Colour	Colourless
Specific Gravity (ASTM D1475)	1.04 – 1.10
Chloride Content (EN 480-10)	< 0.10%

APPLICATION

CastAid CEM 805 is a ready-to-use liquid that can be applied in two ways:

- Direct addition – add directly to the mill or feed conveyor belt

- Continuous dosing – use a volumetric dosing pump for seamless integration into the production line

Industrial trials are recommended to determine the optimal dosage. Consult the product safety data sheet before use.

DOSAGE

Typical dosage rates of **CastAid CEM 805** are between 0.20 – 1.0 kg per tonne of cement (0.02 – 0.10% by weight of cement). Dosage may vary depending on clinker type, type of cement mill, desired mill output and cement performance.

The optimum dosage rate should be determined during plant trials and actual plant use to meet the desired requirement.

COMPATIBILITY

CastAid CEM 805 is compatible with all types of Portland cement and blended cement replacement materials such as GGBS, PFA and limestone, and with all CasTech range concrete admixtures.

PRECAUTIONS

Do not mix with other products without advice from the manufacturer. Should the product freeze, some crystals may appear, which will disappear on agitation or when the temperature rises above freezing.

PACKAGING

CastAid CEM 805 is available in IBC, 200 kg drums and bulk tanks upon request.

STORAGE AND SHELF LIFE

12 months from date of manufacture when stored under warehouse conditions in original unopened packing. Extreme temperature/humidity may reduce shelf life.

HEALTH AND SAFETY

PPE: Suitable protective goggles, gloves and mask must be worn.

Precautions: In case of contact with eyes, rinse immediately with plenty of water; in case of contact with skin, wash off immediately with soap and water. If swallowed, seek medical attention immediately.

Hazard: Regarded as non-hazardous for transportation.

Disposal: Do not reuse containers. Dispose of as per local rules and regulations.

Additional information: Refer to MSDS (available on request).

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TECHNICAL SUPPORT

CasTech provides on-site assistance and consulting services on projects when requested. Technical data sheets on

other CasTech products and guidance on their use are available on request.

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