

Product Data Sheet

CastAid CEM 801

Nov-2025, Ver. 01.01



High-Performance Grinding Aid and Strength Enhancer for Ordinary Portland and Blended Cements

DESCRIPTION

CastAid CEM 801 is a high-efficiency grinding additive formulated from a combination of chemicals that improve the grinding and strength of cements. It is suitable for use in ball mills and vertical roller mills (VRM).

TYPICAL USES

CastAid CEM 801 is recommended for the production of Ordinary Portland Cements (OPC) and blended cements using fly ash, GGBFS and other pozzolanic materials.

ADVANTAGES

Key advantages:

- Increases concrete slump and mortar flowability; enhances concrete and mortar strength by 12 – 15% at all ages
- Increases mill production by 10 – 20%, depending on equipment efficiency and the material ground
- Allows part replacement of clinker with reactive supplements (fly ash, blast-furnace slag) or non-reactive additives (limestone)
- Reduces grinding energy costs
- Improves physical properties of the ground material

STANDARDS

CastAid CEM 801 meets the requirements of ASTM C465-85.

TYPICAL PROPERTIES

Typical properties at 25°C:

Component	Single
Form	Liquid
Colour	Dark brown
Specific Gravity (ASTM D1475)	1.09 ± 0.03
Chloride Content (EN 480-10)	< 0.10%

APPLICATION

CastAid CEM 801 is a ready-to-use liquid additive. Industrial trials are required to determine the optimum dosage. It may be introduced directly into the mill or onto the feed conveyor belt; for continuous processes, incorporate it using a volumetric dosing pump with a regular output.

DOSAGE

Typical dosage rates of **CastAid CEM 801** are between 0.20 – 1.2 kg per tonne of cement (0.02 – 0.12% 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 801 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 801 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).

Product Data Sheet

CastAid CEM 801

Nov-2025, Ver. 01.01



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.

CasTech MIDDLE EAST FZE

T6-04, Sharjah Airport Free Zone, Sharjah, UAE

P.O. Box: 121661 Tel.: +971-6-5489207

Fax: +971-6-5579879 Email: info@castechchem.com