



Carbocel MM 500 HD

Chemical description

Sodium salt of carboxymethyl cellulose

Main use

Binder and thickening agent for glazes and engobes

Typical values

Appearance at 20°C: Powder

pH (2% solution): 6 - 9.5

Viscosity (2% solution, Brookfield LVT @ 20°C, 60 rpm):
3000 - 6000 cP

Moisture at the packaging: max. 10%

Properties

CARBOCEL MM 500 HD is a purified grade high viscosity Carboxymethyl cellulose (CMC).

CARBOCEL MM 500 HD is suitable as binder and rheology modifier for engobes and glaze slips for the ceramic industry.

CARBOCEL MM 500 HD is a easy dispersible CMC. Its features are the same of the traditional CARBOCEL MM 500.

Dispersibility and solubility of CARBOCEL MM 500 HD has been improved thanks to a peculiar industrial process.

By this way also the addition of CMC in powder form directly into the glaze gives very good results in terms of reduction of clots formation, glaze homogeneity and sieving time.

Applications

The dosage of CARBOCEL MM 500 HD depends on the application and can vary normally from 0.05% to 0.4% on dry content.

Tiles

CMC can be added directly into the mill at the beginning of the milling or during the final grinding stages; alternatively it can be added before applying the glaze preparing a 2 - 5% of water mother solution.

Sanitaryware

The addition of CARBOCEL MM 500 HD can be done in different ways according to glaze feature, plant equipments and organisation and habits:

- Total or partial addition in powder form directly into the ball mill. To reduce grinding time, it is also possible to add it only in the last hour of grinding.

- Addition into the glaze slip unloaded from the mill is very often done with a predispersed paste composed by 4 - 8 parts of CARBOCEL MM 500 HD and 96 - 92 parts of water, obtained through a high speed stirrer (standard mixing time: 5-10 minutes). This paste is then kept at rest for 12-24 hours before addition. The addition to the glaze slip requires a "high speed" stirring, and a time between 20 minutes and 1 hour.

- Addition of CARBOCEL MM 500 HD in powder form directly into the glaze.

The use of an antibacterial agent (i.e. Carbosan from Lamberti) is always strongly recommended.

Storage and handling

CARBOCEL MM 500 HD is stable to prolonged storage under conditions where extreme moisture does not occur. The shelf life is at least twelve months if this condition is observed.

Packaging

25 KGs five-ply multiwall paper bag having two plies coated with polyethylene.

Material safety

Consult the Safety Data Sheet

ceramics.lamberti.com

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