

OPTAPIX CF 50

Binder for glazes and engobes



Chemical basis:

Purified sodium carboxymethylcellulose

Characteristics:

Appearance:	white-yellowish granulate
Moisture content:	max. 10 %
Solubility:	water-soluble
CMC-content (dry substance):	min. 98 %
Viscosity (2 %, 25 °C):	approx. 700 mPas

Shelf-life / Packaging:

12 months when stored under proper and dry conditions
Bags of 20 kg

Application:

OPTAPIX CF types differ by their degrees of polymerization and hence the viscosities of their aqueous solutions.

OPTAPIX CF types are used in glazes and engobes as viscosity adjusting, non-foaming binding agents. They improve the abrasion resistance, give glazes or engobes a good fit and prevent running.

Sodium CMC being a polyelectrolyte, the low viscosity, i.e. short-chain types like OPTAPIX CF 12 / CF 25, have a deflocculating effect besides their binding property.

As far as the sodium CMC types with a medium degree of polymerization, such as OPTAPIX CF 50, are concerned their electrolytic effect is to a large extent compensated by their increased intrinsic viscosity; they, therefore, have a rather neutral effect on the viscosity of the glaze slip, at the usual addition quantities.

In general, an increasing degree of polymerization will lead to better binding properties and to an improved water retention, this means a longer drying time.

Further advantages of OPTAPIX CF types are their plasticizing effect on ceramic bodies and an improved dry breaking strength.

The above results have been obtained from trials in our laboratory and plant. In the light of changing conditions they can serve only as a guide and are therefore offered without obligation. We ask you to observe the possible rights of third parties.

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The optimum addition quantity ranges between 0.05 and 1.0 % and depends on the individual working conditions. They are either milled with the glaze constituents or added as aqueous stock solution. The granulate form improves their water-solubility.

Please note that when using OPTAPIX CF types in stock solutions, glazes and/or body slips, antibacterial biocide use is strongly recommended. Consequently, the dosage needs to be adapted to the process conditions.

Adequate products and their specific application instructions can be found on our homepage www.zschimmer-schwarz.com or will be sent to you upon request.

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