



OPTAPIX CF 50 H

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	min. 98 %
Viscosity(2 %, 25 °C)	approx. 700 mPas

Shelf-life / Packaging

12 months when stored under proper and dry conditions

bags of 25 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 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.

