

OPTAPIX C 12 G

Binder for glazes and engobes



Chemical basis:

Purified sodium carboxymethylcellulose

Characteristics:

Appearance:	yellowish granulate
Moisture content:	8 % maximum
Solubility:	readily water-soluble
Bulk density:	approx. 600 g/l
pH (1 %):	approx. 7
CMC content dry:	approx. 99 %
Viscosity (2 %, 25 °C):	approx. 30 mPas

Shelf-life / Packaging:

12 months when stored properly and dry
bags of 25 kg

Application:

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

OPTAPIX C 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 C 12 G / C 25 G, have a deflocculating effect besides their binding property.

As far as the sodium CMC types with a medium degree of polymerization, such as OPTAPIX C 50 G, 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.

High polymer types such as OPTAPIX C 200 G / C 1000 G have a thickening effect on the glaze slip. 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.

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.

OPTAPIX C 12 G

Further advantages of OPTAPIX C 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.

Note:

Please note that when using OPTAPIX C 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.

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.