

Betol[®] 47 T

Inorganic deflocculant and plasticizer for ceramic slips and masses

Chemical description

Betol 47 T is an inorganic binder based on especially modified sodium silicate without any volatile organic additives.

Mode of action

By interaction of the complex polysilicate anions with the surfaces of clay or kaoline particles the surface charges and zeta potentials are modified and thus a deflocculation and decrease of viscosity are achieved. Based on these effects slips/masses with higher dry contents can be used which causes significant reduction of energy and lower tendency of crack forming during the drying and baking processes.

Specification (average values)

Dry content:	approx. 44,5 %	007 *)
Density (20°C):	approx. 1,55 g/cm ³	042 *)
pH: (10 % sol.)	approx. 12,5	008 *)
Viscosity (20°C):	approx. 450 mPas	053 *)
Appearance:	clear to slightly opalescent liquid	
Odour:	almost none	

*) Internal method code – description available on request

Properties

- Stable, alkaline liquid,
- Free of solvents or other organic ingredients.

Application

Betol 47 T acts as deflocculant in slips and masses for fine and coarse ceramics, especially also for the production of wall and floor tiles.

Notes for application

The dosage is usually 0,4 – 0,6 % based on dry weight of the ceramic slip or mass. For each mass / slip the optimum dosage should be defined by deflocculation experiments and viscosity measurements, since the effect depends on the individual surface properties, shape and size of the raw materials particles. Our application service is prepared to give appropriate support for these evaluations.

Storage

Betol 47 T must not be stored in aluminium or galvanized containers. Protect from frost. The containers must be kept tightly closed. Storage stability at least 12 months.

Labelling / Safety

Please see safety data sheet.

Packaging

Container
Road tanker

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