

Sapetin[®] D 27

Dispersant and plasticizer

Chemical description

Sapetin D 27 is an almost neutral and odourless aqueous solution of modified phosphonic acid salts.

Mode of action

Sapetin D 27 has a highly negative charge; it is adsorbed to filler and pigment surfaces and thus creates a repulsion effect between the single particles, so that highly concentrated dispersions with reasonable viscosity can be produced. Due to the high stability of Sapetin D 27 against hydrolysis a stable dispersing effect is ensured thus counteracting agglomeration.

Specification (average values)

Solids content:	approx. 45,0 %	007 *)
Density (20°C):	approx. 1,41 g/cm ³	042 *)
pH value:	approx. 8,3	008 *)
Viscosity (20°C):	approx. 90 mPas	053 *)
Solubility:	freely miscible with water	
Appearance:	colourless to yellow coloured solution	

*) Internal method code – description available on request

Properties

- Highly negative charge.
- Stable against hydrolysis even in alkaline media.
- Excellent dispersing effect in a broad pH value range.
- Has chelating properties (e.g. bonding iron).
- Is fixed to filler and pigment surfaces.
- Particularly effective in dispersing silicate fillers, e.g. kaoline.
- Low addition rates suffice for high efficiency.
- Very low odour level, free of preservatives or organic solvents.

Application

Sapetin D 27 is a dispersant for mineral fillers, e.g. kaolins, calcium carbonate minerals, metal oxide pigments, etc. It is also a plasticizer for self-levelling floor finishes, ceramic compounds, concrete-bonding mortars, cement finishing coats, and cement products. For the production of porcelain the addition of Sapetin D 27 allows to take the green moulded articles smoothly out of the gypsum moulds.

Note

The optimum dosage for Sapetin D 27 can be determined by plotting a dispersant requirement curve. By this means, any tendency to flocculation can be counteracted.

Storage

Sapetin D 27 must be protected from frost during storage. Its shelf life in the original containers is at least one year.

Labelling / Safety

Please see safety data sheet

Packaging

30 kg can
300 kg drum
Container
Road tanker

10/2015