

SERADEF 1003

Dispersing Agent / Deflocculant

Chemical basis:

Sodium Silicate and acrylic Polymer

Characteristics:

Appearance: Clear liquid
Solubility: Water Miscible
Density: 1410-1440 g/l (20 °C)
Viscosity: 15 Sec. \pm 1 (4 mm FordCup 25 °C)
pH: 13,0 \pm 1,0

Safety data:

Labeling according to EU Directives: not relevant

Shelf-life / Packaging:

12 months under proper storage conditions. Should be stored in closed packages at temperatures above 5 °C

Drums of 250 kg, IBC tanks of 1450 kg

Application:

SERADEF 1003 is a liquid deflocculant for ceramic slurries. Even if added in small quantities, SERADEF 1003 leads to a decrease in viscosity and hence facilitates many of the ceramic production processes: such as body preparation.

Owing to its chemical composition, SERADEF 1003 is effective on most of the plastic slurry formulas. Its components burn off completely during the firing process giving no harm to the ceramic ware finish result.

Just like any other electrolyte, an excess of SERADEF 1003 may cause the slurry to increase its viscosity, rather than further decrease it, in accordance with the particles polarity theory. However, an addition of fresh slurry can bring the particles polarity back and solve the problem as the reaction is fully reversible.

According to common practice, we recommend to add SERADEF 1003 at the following percentages:

Body material: 0.60 – 2.30

The shear stress created by the grinding media of the slurry mills does not affect the effectiveness of SERADEF 1003, so that must can be added either before grinding during production.

The above results have been obtained from trials in our laboratory. In the light of changing conditions, they can serve as guide and are therefore provided without obligation. We request to observe the possible rights of third parties.