

**Performance Additives
Decorative**

LAVIOKOLL® C100 Construction additive

General information

LAVIOKOLL® C100 is a tixotropic, antisetling, absorbing additives, rheological controller specific for water borne formulations that forms non transparent gel

LAVIOKOLL® C100 is a thickening and antisetling agent, based on a selected, purified and activated white bentonite clay with a high montmorillonite content

Activity is strictly correlated to its hydration capacity and to give rise to micronic and submicronic particles in dispersion, with a high specific surface; the platelets. These one contribute to create the “body” of the product to be formulated by the formation of an internal tridimensional structure within which different particles and fillers may be incorporated

Physical properties

Composition: purified smectite (98% montmorillonite)
 Physical form: white fine powder
 Bulk Density: 0.7-0.8 g/ml
 Dry residue: 0% > 200 mesh (75 µm)
 Moisture: 9-11%

Application

- Adhesives
- Emulsion paints
- Plaster/renders
- Latex paints

Properties

LAVIOKOLL® C100 is a rheological and thixotropical additive that gives stability and viscosity control, adhesion control and enhances texturing and stippling effects.

It can be incorporated as powder or as an aqueous 3-4 wt% pre-gel (Fig. 1)

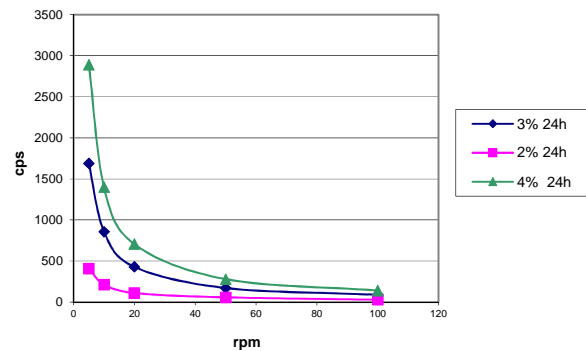


Fig.1 : Laviokoll C100 pre-gel in water at different concentration

LAVIOKOLL® C100 is stable in a wide pH range 3-12 (Fig. 1)

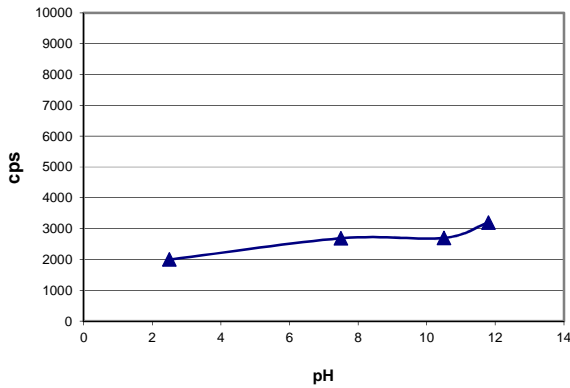


Fig.2 : Laviokoll C100 in water at different pH values

Chemical composition (XRF)

| | |
|--------------------------------|-------|
| Na ₂ O | 3,89 |
| MgO | 3,36 |
| Al ₂ O ₃ | 20,66 |
| SiO ₂ | 59,01 |
| P ₂ O ₅ | 0,03 |
| K ₂ O | 2,10 |
| CaO | 1,31 |
| TiO ₂ | 0,20 |
| MnO | 0,03 |
| Fe ₂ O ₃ | 2,45 |
| LOI | 6,95 |

Incorporation

LAVIOKOLL® C100 will hydrate when added to water. To obtain maximum hydration and optimum performance in the shortest time, we suggest following incorporation procedures:

1. Slowly add **LAVIOKOLL®** and increase shear rate to maximum amount which may be tolerated in the mixing container. Incorporates more quickly in warm water. However, do not allow water temperature to rise above 50° C prior to full hydration. Once hydration has occurred, there is no temperature limitation for **LAVIOKOLL®**
2. Continue to disperse until a constant viscosity is reached (15-30 min)
3. Add other formula ingredients in appropriate order

Recommendation

The viscosity of the slurry could rise during time after the preparation, it's better to measure viscosity the day after.

Dosage

Typical dosage is 0.1% e 3% based on the total formulation. The addition levels depend on the degree of suspension, the rheological properties or viscosity required

Storage stability and packing

Product do not deteriorate in a significant way in a 12 months period. Storage is advisable in a dry, sheltered place in closed bags. Packing is 25 kg net in paper bags.

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