

LAVIOTHIX® P100

Rheological additive for water borne system

General information

LAVIOTHIX® P100 is product of inorganic origin based on clay, with high performances and efficiency, specific for water borne formulations that gives great pseudoplastic behaviour and thixotropy.

Il **LAVIOTHIX® P100** is a thickening and antissettling 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

This elementary particles are responsible of the thixotropic, antissettling, absorbing and binding properties of the product

Chemical- physical properties

Composition: purified smectite (98% montmorillonite)

Physical form: white fine powder

Bulk Density: 0.7-0.8 g/ml

Dry residue: max 3% > 325 mesh (45 µm)

Moisture: max 10%

Applications

- Adhesives
- Emulsion paints
- Bituminous emulsion
- Latex paints

Properties

LAVIOTHIX® P100 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% pregel (Fig. 1)

LAVIOTHIX® P100 is stable in a wide pH range 2-12 (Fig 2)

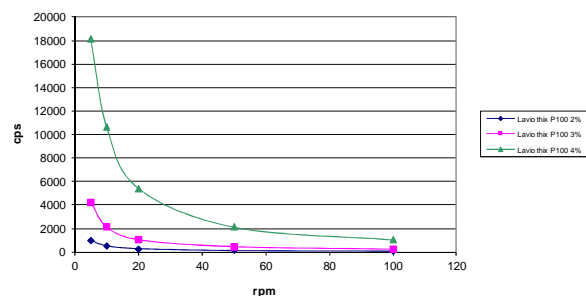


Fig.1 : Laviotrix P100 pre-gel in water at different concentration

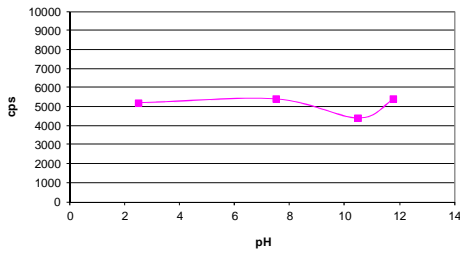


Fig.2 : Laviotix P100 pre-gel at 4% in water at different pH values

Incorporation

LAVIOTHIX® P100 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 **LAVIOTHIX®** 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 **LAVIOTHIX®**
2. Continue to disperse until a constant viscosity is reached (15-30 min)
3. Add other formula ingredients in appropriate order

LAVIOTHIX® P100 shows the same gel formation properties using either a high shear or a low shear (Fig 3)

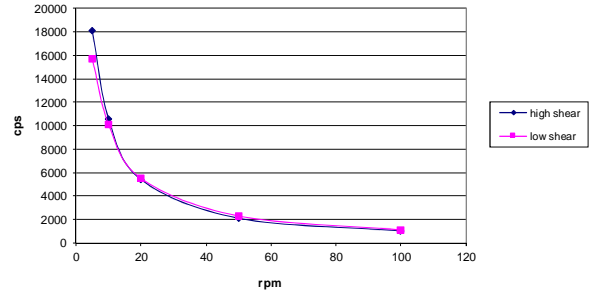


Fig.3 : Laviotix P100 pre-gel in water at 4% using two different shear rate

Recommendation

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

Dosage

Typical addition levels are 0.3% - 3.0% of **LAVIOTHIX® P100** by weight of 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.

Rev 1 July 2012

Information given in this bulletin is based on the state of our knowledge at the date of publication and are believed to be accurate, but do not constitute any engagement or warranty from our part. Buyers and users should make their own assessments under their own conditions and for their own requirements. Information may be changed without any notice. For mandatory characteristics and performance please refer to our Sale Specifications.