Data Sheet Issue 10/2013

LAPONITE JS

The Clear Leader

Product Data

Special Features and Benefits

LAPONITE JS is a synthetic layered fluorosilicate modified with an inorganic polyphosphate dispersing agent. It hydrates and disperses in water to give virtually clear and colourless colloidal sols of low viscosity. At 18 % concentration in water these sols will remain free flowing for at least 1 month.

Recommended Use

LAPONITE JS may be used in coating mixes to produce smooth, coherent, electrically conductive and anti-static films on paper, film and other surfaces. It may also be used in formulations to produce inkjet receiving coatings suitable for full colour printing. Films of LAPONITE JS demonstrate effective barrier properties by reducing migration of macromolecules and colloidal particles. Examples of binders suitable for use with LAPONITE JS include polyurethane, acrylic, vinyl acetate, SBR and polyvinyl alcohol.

Typical Properties

The values indicated in this data sheet describe typical properties and do not constitute specification limits.

Free flowing white powder Appearance:

Bulk Density: 950 kg/m3 Surface Area (BET): 300 m²/g pH (2 % suspension): 10.0 Chemical Composition (dry basis) SiO₃: 50.2 % Chemical Composition (dry basis) MgO: 22.2 % Chemical Composition (dry basis) Li₂O: 1.2 % Chemical Composition (dry basis) Na₂O: 7.5% Chemical Composition (dry basis) P₂O₅: 5.4% Chemical Composition (dry basis) F: 4.8% Chemical Composition (dry basis) Loss on Ignition: 8.7 %

Fluid after 28 days, QA Test Code: ELP-L-2G Sol Stability: Sieve Analysis: 2 % Max >250 microns, QA Test Code: ELP-L-6A

Free Moisture: 10 % Max, QA Test Code: ELP-L-5A

Storage and Transportation

Laponite is hygroscopic and should be stored under dry conditions.

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