

LAPONITE S482

Product Data

Special Features and Benefits

LAPONITE S482 is a synthetic layered silicate modified with a patented dispersing agent. It hydrates and swells in water to give translucent and colourless colloidal liquid dispersions known as sols. At 25 % solids concentration in water, these will remain free flowing for up to 1 year. On addition of small quantities of electrolyte, or on addition to formulations containing e.g. resins, surfactants or pigments, highly thixotropic gels are formed rapidly.

Recommended Use

LAPONITE S482 must be dispersed in water before use and may be added to formulations at any point during manufacture. It is used to impart a shear sensitive structure to a wide range of waterborne formulations including DIY and industrial surface coatings, household cleaners, ceramic and agrochemical products. LAPONITE S482 dispersions may be coated onto paper or other surfaces to give smooth, coherent, and electrically conductive films.

Typical Properties

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

Appearance:	Free flowing white powder
Bulk Density:	1000 kg/m ³
Specific density:	2.5
Surface Area (BET):	370 m ² /g
pH (2 % suspension):	9.8
Free moisture content:	<10 %

Incorporation and Processing Instructions

To prepare a dispersion of LAPONITE S482 at 20 to 25 % solids content in water:

Add the LAPONITE powder to water with rapid stirring; continue mixing at high speed. After a few minutes the viscosity of the pre-mix will begin to rise rapidly. At this time, turn off the stirrer and leave the dispersion to age for up to one hour. During this period of time the viscosity of the mixture will begin to fall. Turn on the stirrer and continue mixing until the pre-mix is a smooth homogenous liquid. High shear mixing is not required to make a dispersion of LAPONITE S482.

Storage and Transportation

LAPONITE products are hygroscopic and should be stored under dry conditions

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