

Technical Data Sheet

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Industrial Additives Division Coatings

LAVIOSA ARGIMEL® B7

Rheological additive for moderate to high polarity solvent-borne systems

General Information

LAVIOSA ARGIMEL® B7 is a rheological additive for moderate to high polarity solvent-borne systems. It gives thixotropic effect, sag control, excellent levelling and prevents pigments from long-term storage settling.

The nature of *LAVIOSA ARGIMEL® B7* is a purified bentonite clay, organically modified with a quaternary alkylammonium compound.

Table 1 Chemical-physical properties.

Properties	Description	
Composition	organically modified smectite	
Physical form	white fine powder	
Bulk density	0,4-0,6 g/mL	
Moisture	≤ 3%	

Applications

LAVIOSA ARGIMEL® B7 is used in a wide range of manufacturing processes, to give the desired rheological control to the system:

- Anti-corrosive paints
- Industrial finishes
- · Anti-fouling paints
- · Printing inks
- Cosmetics

Adhesives

Properties

LAVIOSA ARGIMEL® B7 provides antisettling and anti-sagging properties in high polarity systems such as aromatics, Cellosolve™, acetates, ketones, glycols, alcohols, and resins, like epoxies, nitrocellulose, polyacrylates, unsaturated polyesters, polyurethanes.

Incorporation

LAVIOSA ARGIMEL® B7 requires high shear forces applied and a chemical (polar) activator, to reach the proper level of delamination of the organo-bentonite platelets. While heat is not essential in most cases, processing temperatures above 20 °C are preferred. Suitable polar activators are low molecular weight species.

Table 2 Activators' dosage (based on Laviosa ARGIMEL® weight).

Polar activator	%
Acetone/H₂O (95:5)	60
Methanol/H₂O (95:5)	33
Ethanol/H₂O (95:5)	50
Propylene Carbonate	33
Propylene Carbonate/H₂O (95:5)	33





It is always recommended to empirically determine the proper level of addition with, because either defect or excess of chemical activator would result in a non-optimal rheology development.

Additional chemical dispersants have to be used once organoclay is first dispersed. Several methods can be used to incorporate *LAVIOSA ARGIMEL® B7*:

1. "Direct addition" technique.

LAVIOSA ARGIMEL® B7 powder is added directly to the solvent/resin mix before pigment addition and milling. It is advisable to allow the organoclay to wet and disperse at first and to add the polar activator before or after the pigments. Surfactants must be added at last.

2. "Pre-gel" technique.

LAVIOSA ARGIMEL® B7 is added as described above in a suitable solvent at a 5-10% concentration, together with a polar activator. The so activated gel is then added to the binder solution and stirred. After pigment addition, the mix is finally milled. Higher activated pre-gel concentrations (15-20%) can be obtained with the aid of suitable dispersing agents, to be added after full organoclay dispersion.

Dosage

Dosage strongly depends on the system and on the degree of thickening required. In paints and industrial finishes, typical levels are between 0,2% and 0,6% of **LAVIOSA ARGIMEL® B7**.

For primers and printing inks, higher levels are required (0,5-1,0%). To reach strong

anti-sagging properties, up to 3,0% can be used.

LAVIOSA ARGIMEL® B7 is compatible to a wide range of formulations

Storage stability and packing

Product does not deteriorate significantly in 3 years. *LAVIOSA ARGIMEL® B7* should be stored in a dry, sheltered place in original closed bags.

Packing is available in 25 kg net paper bags.

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