

Hectorite Based Rheological Additives Improve Performance in Ready and Dry Mix Construction Systems

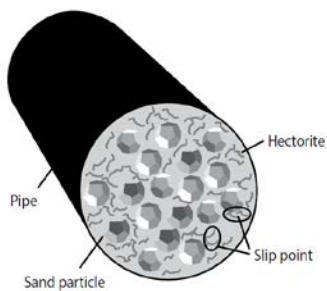
Hectorite based rheological additives are highly efficient in the flow control properties of stuccos, plasters, grouts and tile mortars. They can be combined with or replace cellulose to improve performance properties. Due to their higher efficiency they help reduce costs. Elementis application labs and technical experts are at your service to support you in order to maximize the benefits in your formulation.

Elementis Hectorite Clay Based vs. other mineral based and cellulosic rheological additives

- Higher Efficiency
- Improved Suspension Stability
- Smoother Application

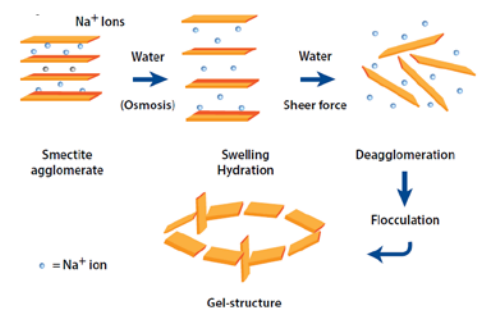
Hectorite clay based additives impart thixotropic flow: At low shear the clay network generates high viscosity and at high shear the network breaks down allowing easy application during pumping, troweling and spraying. The improved workability and tooling can mainly be attributed to the platelet structure of the hectorite clay which reduces the friction between sand and cement particles. The hectorite improves the “slip effect” which helps with the pumping of material. The clay structure breaks down easily when shear is applied and the resulting viscosity is lower than cellulose products. In addition, the clay platelets can reduce the stickiness caused by cellulose products; therefore, improving application speed and surface quality.

Hectorite Slip Effect



Natural hectorite clay

Thickening Mechanism of BENTONE® Products



High performance hectorite based rheological additives for improved performance in construction systems

Product Name	Product Type	% Active Matter	Composition
BENTONE® OC	Powder Rheology Modifier	40-60%	Unrefined Natural Hectorite, 40-60% active hectorite
BENTONE® CT	Powder Rheology Modifier	50%	Unrefined Natural Hectorite, 50% active hectorite
BENTONE® GS	Powder Rheology Modifier	100%	Refined and beneficiated hectorite
BENTONE® LT	Powder Rheology Modifier	100%	Organically modified refined hectorite
BENAQUA® 4000	Powder Rheology Modifier	100%	Hectorite/ polymer composite

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