



Rheology Additives for Ceramic Production

Elementis, an industry leader in innovation and sustainability, offers you the solution to build up the right viscosity in your ceramic production process. Our BENTONE® range has been developed to improve stability and solid material suspension in primary blends, based in special clays from smectite and hectorite, contribute to fire resistant and highly effective viscosity build effect. Our application labs and technical experts are at your service to support you in order to maximize the benefits in your formulation.

BENTONE® benefits vs. synthetic rheological systems

- High purity inorganic materials
- Low iron content
- High temperature resistance
- Ability to develop a wide range of viscosities
- Improved impact resistance
- Improve homogeneity in high solids dispersions
- High efficiency keeping solids in coalescence
- Materials settling reduction

BENTONE® additives Improve stability and suspension in glazes and primary blends

BENTONE® rheological additives recommended for ceramics are based on hectorite clay, a highly refractory mineral with similar firing characteristics to ceramic products providing tremendous stability advantages. Our additives help to improve glaze wettability and stability, resulting in a better covering and uniform color spread along the ceramic surface. Anti-settling effect and faster drying helps to reduce production cycles. BENTONE® has no influence on the quality of the fired glazes. BENTONE® EW rheological additive imparts a very high yield value which will give a good anti-settling

effect and prevent run-off problems. BENTONE® GS helps in glazes application process by improving glaze sprayability and homogeneity. Also acts on settling reduction. It means a positive impact in production performance. BENTONE® CT is low viscosity rheological additive useful to rework ceramics blends with excessive viscosity. Its low viscosity profile and ability to keep particles in suspension helps to solve any rheological deviation on ceramic blends.



0.1% BENTONE® EW
(Keeps true color with
improved sag control)



Standard (Discolored
& Poor Sag)

Performance Inorganic Rheological Modifiers for Ceramic Systems

Product name	Product type	Description
BENTONE® CT	Smectite Clay, 50% hectorite	Controlled viscosity builder, Helps homogenize high solids content dispersions and achieve fast flow in piping and extrusion process.
BENTONE® EW	Modified Smectite Clay, High purity, Refined Hectorite	Provides fast and high viscosity level in primary blends. Improves homogeneity and pipe flow by keeping high solid load in coalescence. High temperature resistance. Anti-settling effect and prevent run-off problems.
BENTONE® GS	Modified Smectite Clay, Refined Hectorite	Provides fast and high viscosity level in primary blends. Improves homogeneity and pipe flow by keeping high solid load in coalescence. High temperature resistance.
BENTONE® OC	Hectorite Clay, 50% active	Improve of long-term suspension stability. Low viscosity builder. Suitable for high solid load systems. Elimination of hard settling.
BENTONE® CRS	Non purified Smectite	Fast and High viscosity builder. Improve of long-term suspension stability. High temperature resistance.

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**Enhanced
Performance**
Through Applied
Innovation