

Rheological Additive for Water-Borne Systems

GENERAL INFORMATION

BENTONE MA is a rheological additive based on a purified hectorite clay that imparts thixotropy and good anti-settling properties to water-borne systems.

PHYSICAL PROPERTIES

Composition	purified hectorite clay
Color / Form	off-white, soft and finely divided powder
Density	2.6 g/cm ³

APPLICATIONS

- Adhesives
- Agro chemicals
- Cementitious systems
- Ceramic glazes
- Cosmetics
- Crop Protection Agents
- Oil-in-water emulsions
- Latex paints
- Electro-deposition paints
- Foundry resins/foundry paints (washes)
- Household cleaners
- Polishes
- Plaster compounds
- Water-reducible systems
- Welding electrodes

KEY PROPERTIES

BENTONE MA rheological additive

rheological properties

- provides thermo stable aqueous phase viscosity control
- imparts thixotropy
- prevents settling

application performance

- enhances texturing and stippling effects

system stability

- electrolyte tolerant
- prevents hard settlement of pigments/fillers
- reduces syneresis
- minimises floating/flooding of pigments
- stabilises emulsions

easy to use

- can be incorporated as powder or as an aqueous pre-gel

INCORPORATION

BENTONE MA rheological additive should be incorporated using high-shear equipment (high-speed disc impellers, rotor-stator mixers etc).

To avoid lumping, add BENTONE MA slowly to warm water and, to achieve best results, disperse under high-shear mixing for 25–40 minutes.

Pre-gels, up to 10% in some cases, can be prepared in water but viscosity may continue to increase over 24–48 hours with BENTONE MA levels above 2%. This effect can be significantly reduced by using water at a temperature above 35°C (95 °F). BENTONE MA functions within a range pH 6–11 and an alkaline pH will speed rate of dispersion.

It is important that the BENTONE MA is fully dispersed in the water before any other components, particularly surfactants, are added. BENTONE MA can, in some cases, be processed as a powder added directly to the formulation. Intensive shear together with the solids of the formulation will provide maximum dispersion and viscosity development.

LEVELS OF USE

Typical addition levels are 0.3 - 3.0% BENTONE MA additive by weight of total formulation, depending upon the degree of suspension, the rheological properties or viscosity required.

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REGULATORY

For the most current regulatory status, please refer to the MSDS for BENTONE MA. It may be viewed and downloaded from our website at:

www.elementisspecialties.com

HANDLING AND SAFETY

More detailed information on handling and safety for each product is included in the relevant material safety data sheet, available for each product.

STORAGE RECOMMENDATIONS

Store in a dry place. BENTONE MA additive will absorb moisture if stored under high humidity conditions. This, however, will not affect its overall

PACKAGING

BENTONE MA rheological additive is available in multi-ply paper bags. Please contact your local Elementis Specialties representative for the packaging available in your region.

SHELF LIFE

BENTONE MA has a shelf life of 4 (four) years from date of manufacture.

PRODUCT NUMBER

10841

QUALITY ASSURANCE

Since 1992 the company is a holder of the ISO 9001 / ISO 9002 certificates, which guarantees that all operations are conducted according to the stipulated standards.

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