

Rheological Additive for Moderate to High Polarity Organic Media

Easy to Incorporate

GENERAL INFORMATION

BENTONE SD-2 rheological additive is an organic derivative of a bentonite clay. It is designed for use in moderate to high polarity systems containing solvents such as ketones, esters, glycol ethers and alcohols, including polar systems with some aromatic solvents.

BENTONE-SD 2 is easy to incorporate and can be added dry to the pigment grinding process without requiring the use of a chemical activator or the preparation of a pregel. It may be used for post correction.

PHYSICAL PROPERTIES

Composition	organic derivative of a bentonite clay
Color / Form	very light cream, finely divided powder
Density	1.62 g/cm ³
Particle size (dispersed)	less than 1 micron

APPLICATIONS

- Acid-curing systems
- Adhesives
- Anti-corrosion paints
- Automotive finishes/primers
- Epoxy systems
- Foundry paints
- Gravure printing inks
- Industrial finishes
- Inorganic zinc-rich coatings
- Maintenance coatings
- NC lacquers/inks
- Paint removers
- Polyester repair putties
- PU two-pack systems
- Sealants
- Vinyl paints (high-build)

KEY PROPERTIES

- is a cost-effective replacement for conventional organoclay additives
- disperses very easily, even under low shear conditions
- provides stable viscosity build, controls sag and pigment settling
- eliminates the need for pregels
- needs no chemical activator
- can be added as a powder to the millbase either before or after the pigment dispersion or during letdown

INCORPORATION

BENTONE SD-2 is simple and easy to incorporate in moderate to high polarity systems. It may be added dry to the grinding step together with the other dry raw materials such as pigments and fillers. When dispersed in the millbase concentrate it develops its full rheological properties. The addition of a chemical activator is not necessary.

When added to the pigment grind, BENTONE SD-2 is not sensitive to high temperatures and does not require a minimum temperature for activation.

The wet ability and dispersibility of BENTONE SD-2 additive decreases as the proportions of aromatics and low-polarity solvents in the system increase.

BENTONE SD-2 may be used for post-correction after letdown. Pre-tests are recommended to determine whether BENTONE SD-2 will sufficiently disperse under normal stirring conditions or whether a pre-dispersion in solvent/binder is advisable. Post correction is best achieved by pumping a portion of the main batch into a tank fitted with a high speed disperser. Add BENTONE SD-2 and grind to an acceptable Hegman F.O.G. Return this dispersed and activated portion containing the BENTONE SD-2 to the main tank and mix until uniform.

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LEVELS OF USE

The level of BENTONE SD-2 additive to be used in a specific system depends on the degree of thickening, sag and pigment settling control desired. Use levels are typically 0.2 % - 1.0 % by weight of the entire formula. When reformulating with BENTONE SD-2, a good starting point is replacement of the currently used organoclay or fumed silica at an equal weight, followed by optimisation.

In many systems, at higher thickener concentration levels, BENTONE SD-2 is more efficient than BENTONE 27 or fumed silica. It is not efficient in solvents alone nor should it be used in greases or similar binderless systems.

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 cool, dry location.

PACKAGING

BENTONE SD-2 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 SD-2 has a shelf life of 4 (four) years from date of manufacture.

PRODUCT NUMBER

10800

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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