

## BENTONE® 1000

### Rheological Additive for Low to Intermediate Polarity Organic Systems

#### GENERAL INFORMATION

**BENTONE 1000** is an organic derivative of bentonite clay. This highly efficient and cost-effective rheological additive is designed for low- to intermediate polarity organic systems.

#### CHEMICAL & PHYSICAL PROPERTIES

Composition	organic derivative of a bentonite clay
Color / Form	Very light cream / finely divided powder
Density	1.7 g/cm <sup>3</sup>
Moisture	3.0 % max

These are typical properties not to be used for specification purposes.

#### APPLICATIONS

- Trade sales paints
- Varnishes
- Light industrial finishes
- Asphaltic based coatings
- Industrial maintenance
- Marine coatings

#### KEY PROPERTIES

- Easy to use
- Highly efficient with consistent rheological properties
- Eliminates need for pregels
- Eliminates need for chemical activators in conventional solvent based systems

#### INCORPORATION

##### General

Incorporation of **BENTONE 1000** in organic systems (e.g. paints) requires high-shear dispersion equipment.

**BENTONE 1000** should be incorporated in the dispersion phase under high shear. A pigmented Cowles dispersion is sufficient. A chemical activator is not required, although sometimes the addition of a small quantity of water (ca 1/3 the weight of **BENTONE 1000**) is beneficial.

The **BENTONE 1000** powder is added directly to the resin/solvent blend and is thoroughly mixed for 10 minutes. The pigments and fillers are then added and dispersed with high shear for at least 15 minutes.

There is generally no need to pregel **BENTONE 1000** additive. However, in low solvency, high solids systems it may be desirable to use a **BENTONE 1000** pregel.

1. Mineral Spirits 87 parts
2. **BENTONE 1000** 10 parts
3. Water 3 parts

Full efficiency will be obtained when the pregel is added to the dispersion phase.

##### Suitable dispersion equipment

High-speed disc impellers (Cowles dissolver); pearl-, sand-, ball- and three-roll mills.

#### LEVELS OF USE

The quantity of **BENTONE 1000** to use depends on the system. For most paint applications typical levels are between 0.2 % and 1.0 % **BENTONE 1000** based on total system weight.

In systems containing conventional rheological additive levels above 1.0 % by weight, **BENTONE 1000** is typically more efficient and lower levels may be used.

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## BENTONE® 1000

### HEALTH AND SAFETY

Before using this product please consult our Safety Data Sheet (SDS) for information on safe handling and storage. The SDS can be found on the company website.

### STORAGE RECOMMENDATIONS

Store in a cool, dry location.

### SHELF LIFE

**BENTONE 1000** has a shelf life of 4 (four) years from date of manufacture.

### 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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