

## BENTONE GEL<sup>®</sup> SS71 V

### Non-animal Origin Rheological Additive For Cosmetics And Toiletries

#### GENERAL INFORMATION

**BENTONE GEL SS71 V** is a specially prepared dispersion of an organically modified hectorite in Petroleum Distillate.

**BENTONE GEL SS71 V** delivers a combination of benefits in a single, easy to use product. It is designed to impart rheological control and suspension to organic- and silicone-based cosmetics.

**BENTONE GEL SS71 V** is also particularly useful in emulsions and can be used in "cold process" systems. It provides thermostable viscosity control of the emulsion's oil phase, improves application properties, enhances skin-feel by masking greasy or tacky components and imparts a pleasant residual silkiness to the skin.

**BENTONE GEL SS71 V** is an alternative to traditional polymer or cellulose-based thickeners for stabilising emulsions.

#### INCI NAME

Petroleum Distillates, Distardimonium Hectorite, Propylene Carbonate

#### CHEMICAL & PHYSICAL PROPERTIES

Color / Form	Light Buff
Viscosity, Brookfield Helipath, TF spindle, Pa.s @ 2.5 rpm	1100 – 2500
Infrared	To Match Standard
% Ash Content	5.6 - 6.6
Microbial Content	Less Than 100 cfu/g

These are typical properties not to be used for specification purposes

#### APPLICATIONS

- Lip products
- Make-up products
- Creams/Ointments
- Hair preparations
- Sunscreens

#### KEY PROPERTIES

Non-animal origin

Rheological control

- Predictable, reproducible and stable viscosity control
- Shear-thinning viscosity
- Excellent suspension of pigments and actives
- Controlled alignment of special-effect pigments
- Thermostable viscosity raises apparent melting point and ensures cost-efficient use of UV filters
- Emulsion stabilization [w/o and o/w ]

Convenience

- Optimally pre-activated and dispersed organoclay
- Incorporates with medium-shear mixing
- Can be added at any convenient stage of manufacture
- Gives a high degree of formulating flexibility
- Provides highly reproducible results for multi-site production requirements

Acceptability

- Non-abrasive
- Provides smooth feel to skin
- Toxicologically safe ingredients

#### INCORPORATION

**BENTONE GEL SS71 V** can be added at any convenient suitable stage during the manufacturing cycle.

**BENTONE GEL** additive is a very high viscosity, shear-thinning product. To ensure good homogeneous mixing is achieved, care must be taken to overcome the large viscosity differential existing between the **BENTONE GEL** and the other lower viscosity components. Choice of mixing equipment and the configuration within the mixing vessels are critical factors in developing the optimum performance of the **BENTONE GEL** additives. The use of medium- to high-shear mixing equipment is recommended.

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## BENTONE GEL® SS71 V

### BATCH PROCESSING

- Single Phase Systems : Always add the BENTONE GEL, under shear, to a portion of the organic component or solvent with which it is most compatible. Mix until homogeneous before adding the other ingredients.
- Multi-Phase Systems e.g. emulsions : Treat as the single phase but always ensure the BENTONE GEL additive is thoroughly mixed in before the emulsification stage.
- Continuous Processing : The BENTONE GEL should be added to the oil phase at any convenient point that meets the above guidelines for batch processing. In multi-manifold systems, a flowable pre-mix of the BENTONE GEL with a compatible oil or solvent should be made in a side pot. Where only lower-shear mixing equipment is available, stir the BENTONE GEL alone and then slowly add the most compatible component by portions, always ensuring the mixture remains homogeneous at each stage.

### LEVELS OF USE

The level of use of the BENTONE GEL will depend on the formulation. Suspension will be provided by 2.5-10.0% additions. In emulsions, thickening will occur in the oil phase only and emulsion viscosities will be influenced by 3-5% additions. Novel emulsification effects can be achieved, giving light feel and lower viscosities. In some water-in-oil systems a reduction of surfactant may be achievable by the use of BENTONE GEL additive.

Higher levels of BENTONE GEL will have a greater viscosity influence and thermostable viscosity in single phase systems may be achieved by 10-25% additions.

### COMPATIBILITY

BENTONE GEL additives can contribute greatly to a formulation's stability by improving the compatibility of other ingredients. Care should be taken to determine the compatibility of the BENTONE GEL additive with the oils, actives or surfactant ingredients within a formulation. The wide range of grades available allows selection of the optimal carrier and organoclay for each system.

### 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 away from excessive heat.

### SHELF LIFE

BENTONE GEL SS71 V has a minimum shelf life of 2 (two) 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.

### SUSTAINABILITY

BENTONE GEL SS71 V is a raw material approved under the RSPO Mass Balance system.



RSPO - 1106301

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