BENTONE® EW NA

non-animal origin
rheological additive
for aqueous cosmetics and toiletries

GENERAL INFORMATION
BENTONE EW NA additive is a highly beneficiated, easily dispersible powdered smectite clay. It imparts thixotropic viscosity and good suspension control to the water phase of cosmetics.

INGREDIENTS
INCI name:
Hectorite

APPLICATIONS
- Oil in Water Emulsions
- Water in Oil Emulsions
- Creams
- Lotions
- Anti-Perspirants
- Deodorants
- Colour Cosmetics
- Face Packs
- Facial Make-Up
- Sun Care Products
- Hair Care Products

KEY PROPERTIES
BENTONE EW NA rheological additive
Non-animal origin
Is easily processed as a powder or pre-gel
Increases the viscosity of the aqueous phase and stabilises viscosity on ageing, at varying temperatures and under different shear conditions
Is stable over the pH range 6-11
Imparts thermostable thixotropy/pseudoplasticity
Provides excellent suspension control
Reduces phase separation and syneresis
Is non-abrasive and imparts smooth silky feel to cosmetics and personal care products

CHEMICAL AND PHYSICAL DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>% Drying Loss When Packed</td>
<td>max. 7.5</td>
</tr>
<tr>
<td>% Thru 200 Mesh Sieve</td>
<td>94.0 – 100.0</td>
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<tr>
<td>Gel Ability (cP)</td>
<td>1600 - 2400</td>
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<tr>
<td>Green Tristimulus Colour</td>
<td>68 - 80</td>
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INCORPORATION
BENTONE EW NA additive is easy to process. No chemical activator or increased temperature is required.

1. Add BENTONE EW NA to a vessel containing only water, pH 7.0 - 8.0. If necessary, adjust pH level. High pH may lead to dispersion difficulties due to rapid hydration of BENTONE EW NA, whereas a low pH leads to reduced efficiency and excessively long hydration times.

2. Mix at highest practicable speed for 10 minutes.

3. After sufficient hydration time, introduce glycols, defoamers, biocides, dispersants etc. (mix).

4. Add pigments, fillers, active ingredients and disperse.

5. Complete dilution.

LEVELS OF USE
Typical use levels of BENTONE EW NA are 0.3% to 1.0% based on total system weight.

SHELF LIFE
BENTONE EW NA has a shelf life of 4 (four) years from date of manufacture.

STORAGE RECOMMENDATIONS
Store in a dry place. BENTONE EW NA additive will absorb atmospheric moisture in high humidity conditions.

TOxicity
This summary is provided as an overview of more detailed toxicity test results on BENTONE EW NA. Comprehensive reports detailing the procedure and results of these tests are available upon request.

ACUTE ORAL TOXICITY (RATS)
BENTONE EW NA has an acute oral LD50 greater than 5.0g/kg of body weight.

PRIMARY SKIN IRRITATION (RABBITS)
BENTONE EW NA is considered minimally irritating to the skin of rabbits.

PRIMARY EYE IRRITATION (RABBITS)
Using a modification of the procedure described in 16-CFR Hazardous Substances Act, Section 1500.42 (Wolcott Procedure), BENTONE EW NA is considered to be severely irritating to the rabbit's eyes without a wash and minimally irritating to the rabbit's eyes with a wash-out 4 seconds after instillation.

SAFETY
Before using this product, please consult our MSDS.

ECOCERT
BENTONE EW NA is approved by Ecocert Greenlife in accordance with the Natural and Organic Cosmetics standards.