

TECHNICAL DATA SHEET

Hectorite Gel Soft

Description: Hectorite Gel Soft is a specially prepared dispersion of a non-animal origin organically modified hectorite in Caprylic/Capric Triglyceride. This grade is designed to impart rheological control and suspension to organic- and silicone-based cosmetics. Hectorite Gel Soft 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. Hectorite Gel Soft is an alternative to traditional polymer or cellulose-based thickeners for stabilizing emulsions.

INCI Name: Caprylic/Capric Triglyceride, Stearalkonium Hectorite, Propylene Carbonate

CAS: 73398-61-5, 12691-60-0, 108-32-7

Chemical & Physical Properties:

Color / Form	Tan paste
Viscosity	1500 – 3200
Ash Content %	7.6 - 8.2
Infrared	To Match Standard
Microbial Content	Less than 100 cfu/g

These are typical properties not to be used for specification purposes

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

Disclaimer: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability & completeness of such information for his own particular use.

- 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: Hectorite Gel Soft can be added at any convenient suitable stage during the manufacturing cycle. Hectorite Gel Soft 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 Hectorite Gel Soft 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 Hectorite Gel Soft additives. The use of medium- to high-shear mixing equipment is recommended.

Batch Processing:

- Single Phase Systems : Always add the Hectorite Gel Soft , 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 Hectorite Gel Soft additive is thoroughly mixed in before the emulsification stage.
- Continuous Processing: The Hectorite Gel Soft 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 Hectorite Gel Soft with a compatible oil or solvent should be made in a side pot. Where only lower-shear mixing equipment is available, stir the Hectorite Gel Soft alone and then slowly add the most compatible component by portions, always ensuring the mixture remains homogeneous at each stage.

Compatibility: Hectorite Gel Soft 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 Hectorite Gel Soft 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.

Applications: Anti-Perspirants, Skin Care Products, Sun Care Products, Lip Products, Eye Shadow, Foundations

Country of Origin: Germany