

non-animal origin
rheological additive
for aqueous cosmetics and toiletries

GENERAL INFORMATION

RHEOLUXE 811 is a high efficiency polyurethane thickener developed for use in aqueous systems.

RHEOLUXE 811 is readily dispersible in water and water/organic mixtures. It has been especially designed for use in anhydrous formulations, where water is added at point of use.

RHEOLUXE 811 is also particularly useful in emulsions and can be used in "cold process" systems. It is a non-ionic thickener, which provides shear thinning viscosity control of the emulsion's and improves application properties.

RHEOLUXE 811 is an alternative to traditional cellulose-based, polyacrylic and other urethane thickeners for stabilising emulsions.

INGREDIENTS

INCI name:

Steareth-100/PEG-136/HDI Copolymer

APPLICATIONS

- Powder Products
- Make-up Products
- Creams/Ointments
- Hair Preparations
- Sunscreens

KEY PROPERTIES

RHEOLUXE 811 rheological additive

Non-animal origin

Rheological control

- Predictable, reproducible and stable viscosity control
- Shear-thinning viscosity
- Excellent suspension of pigments and actives
- Smooth and even application
- Emulsion stabilization

Convenience

- Easy to disperse in water or can be incorporated into the mill base
- Disperse in water with high speed mixing, then add to formulation
- 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
- Toxicologically safe ingredients

NOTE: The information herein is currently believed to be accurate. We do not guarantee its accuracy. Purchasers shall not rely on statements herein when purchasing any products. Purchasers should make their own investigations to determine if such products are suitable for a particular use. The products discussed are sold without warranty, express or implied, including a warranty of merchantability and fitness for use. Purchasers will be subject to a separate agreement which will not incorporate this document.

© Copyright 2012, Elementis Specialties, Inc. All rights reserved. Copying and/or downloading of this document or information therein for republication is not allowed unless prior written agreement is obtained from Elementis Specialties, Inc.

® Trademark of Elementis Specialties, Inc.

www.elementisspecialties.com

v. 18th March 2014

CHEMICAL AND PHYSICAL DATA

Color/Form	White Powder
Active Matter	99-100%
Cloudpoint (1% in water)	70 - 80°C
Melting Point	53-63°C
Viscosity (2% in water)	100 – 1000mPa.s.

INCORPORATION

RHEOLUXE 811 can be added at any convenient suitable stage during the manufacturing cycle. RHEOLUXE 811 additive is a shear-thinning powder product. To ensure good homogeneous mixing is achieved, a pregel in water can be made or it can be added to the milling paste prior to addition of pigments and other powders. However, in some cases it is possible to add RHEOLUXE 811 as a powder under careful mixing. In formulations where it is added as a dry powder, RHEOLUXE 811 is just mixed with the various other components.

Batch Processing

Single Phase Systems

Always add the RHEOLUXE 811, under shear, to a portion of the water component or to the mill base. Mix until homogeneous before adding the other ingredients.

Multi-Phase Systems e.g. emulsions

Treat as the single phase but always ensure the RHEOLUXE 811 additive is thoroughly mixed in before the emulsification stage or add at the end after emulsion has been formed and cooled.

Continuous Processing

The RHEOLUXE 811 should be added to the water phase at any convenient point that meets the above guidelines for batch processing. In multi-manifold systems, a flowable pre-mix of the RHEOLUXE 811 with water should be made in a side pot.

LEVELS OF USE

The level of use of the RHEOLUXE 811 will depend on the formulation. Typical addition levels are 0.2 – 3.0%.

COMPATIBILITY

RHEOLUXE 811 additives can contribute greatly to a formulation's stability. Care should be taken to determine the compatibility of the RHEOLUXE 811 additive with the actives, solvents or surfactant ingredients within a formulation.

TOXICITY

Care is taken to ensure that the ingredients used in RHEOLUXE 811 additives are not known to be injurious to health in any way and have been toxicologically tested to ensure their safety. However, the RHEOLUXE 811 additives have not been subjected to testing involving the use of animals within the last 10 years.

STORAGE TEMPERATURES

Store in a dry area away from excessive heat.

SHELF LIFE

RHEOLUXE 811 has a shelf life of 3 (three) years from date of manufacture.

SAFETY

Before using this product, please consult our MSDS.

USA Head Office
Elementis Specialties, Inc.
469 Old Trenton Road
East Windsor, NJ 08512
USA
Tel.: +1 609 443 2500
Fax: +1 609 443 2422

Europe
Elementis UK Ltd
c/o Elementis GmbH
Stolberger Strasse 370
50933 Cologne
Germany
Tel.: +49 221 2923 2000
Fax: +49 221 2923 2011

Malaysia
Elementis Specialties, Inc.
Lot PT 55, 64 & 65
Jalan Hulu Tinggi 26/6
Seksyen 26
40400 Shah Alam
Selangor Darul Ehsan
Malaysia
Tel.: +60 3 5191 9979
Fax: +60 3 5191 6811

China
Deuchem (Shanghai) ChemicalCo., Ltd.
99, Lianyang Road
Songjiang Industrial Zone
Shanghai
China 201613
Tel.: +86 21 5774 0348
Fax: +86 21 5774 3563