

Optimizing paper and cardboard coatings

Elementis synthetic thickeners



Optimizing paper and cardboard coatings

Elementis synthetic thickeners

Achieving the perfect paper and cardboard coating involves striking a delicate balance between rheology and water retention. These factors are crucial in simplifying coating machine operations and enabling precise control over coating volume.

Versatile alternatives to natural co-binders

In coating applications, the binder plays a multifaceted role, minimizing binder migration to the base paper during application is pivotal. For that reason, synthetic thickeners must exhibit strong dynamic water retention to prevent binder migration with water to the base sheet. This ensures coating color stability within the circulation system and maintains smooth coating machine performance. When coating color water retention remains consistent, paper properties during printing and processing retain their high quality.

Our RHEOLATE® solutions have been crafted with your ease and comfort in consideration. They can be effortlessly integrated into your coating color preparation process, making them easy to use and enhancing operational efficiency.

RHEOLATE® products are a versatile alternative to natural co-binders, offering substantial cost savings with low dosage requirements.

Optimized Rheology

Our product portfolio provides options for adjusting rheology. Achieving optimal rheology during application ensures adequate coating coverage, while attaining the right high shear rheology enhances coating machine efficiency.

Designed with your convenience in mind

- *Optimal viscosity modification:* experience the perfect thickening effect with our portfolio of viscosity modifiers, tailored to meet your precise rheological requirements.
- *Effortless application:* our products are designed for ease of use, simplifying the thickening process and enhancing your operational efficiency.
- *Superior water retention:* maintaining ideal water-holding capacity is vital when coating paper. Our products excel in water retention, preventing binder migration to the base paper, ensuring stable and high-quality coatings.
- *Safe for food contact:* safety is paramount in our final products. All thickeners in our paper portfolio are approved for use in food contact applications, offering you peace of mind when using them in applications involving food contact.
- *Environmentally friendly & APEO and VOC-free:* our products are supplied as APEO and VOC-free liquids, with an active concentration ranging from 25% to 30%.

Product portfolio

	RHEOLATE® 125P	RHEOLATE® 185P
BfR 36	Yes	Yes
FDA 176,170& 180	Yes	Yes
GB 9865	Yes	Yes
Solids content	25%	30%
Type	ASE	HASE

Thickening mechanism



paper coating color, before adding synthetic thickener



paper coating color, after adding synthetic thickener

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 2023, Elementis Specialties, Inc.

All rights re-served. 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.

December 2023

For more details please contact:**North America**

Elementis
469 Old Trenton Road
East Windsor
NJ 08512, USA
T +1 609 443 2500

Europe

Elementis UK Ltd
c/o Elementis GmbH
Stolberger Strasse 370
50933 Cologne, Germany
T +49 221 2923 2066

Asia

Deuchem (Shanghai)
Chemical Co., Ltd.
99, Lianyang Road
Songjiang Industrial Zone
Shanghai, China 201613
T +86 21 577 40348

www.elementis.com