RHEOLATE[®] 222

Associative thickener for high shear-rate viscosity build in waterborne systems

GENERAL INFORMATION

RHEOLATE 222 is a 20% solids, VOC-free polyether polyurethane associative flow modifier for aqueous applications. It is designed for use in emulsion paints and other waterborne systems including inks, textile coatings, adhesives and sealants where maintaining viscosity at high shear during product application and improved film levelling are required.

RHEOLATE 222 can be used alone with small particle size latex systems or in combination with a co-thickener such as RHEOLATE 255 or RHEOLATE 266 if higher mid-shear (package) viscosity is required.

RHEOLATE 222 has shown more efficient high-shear viscosity development and improved flow and levelling in the newer VOC-free gloss and semi-gloss systems than most other viscosity modifiers.

CHEMICAL & PHYSICAL PROPERTIES

Composition	polyether polyurethane resin solution in water
Colour	cloudy white
Non-volatile	19.5 - 20.5 %
Viscosity	max. 4000 mPa.s
	Brookfield RVT#3,
	spindle, 20 rpm
Carrier Solvent	100 % water
Density	1.03 g/cm ³

These are typical properties not to be used for specification purposes.

APPLICATIONS

- High quality, low VOC latex paints
- High-gloss interior and exterior latex paints
- Semi-gloss interior and exterior latex paints
- Flat interior and exterior latex paint
- Other latex systems requiring high film build and improved flow and levelling
- Inks
- Adhesives
- Textile coatings

KEY PROPERTIES

- Highly efficient high-shear rate viscosity build
- Excellent levelling
- Enhances film build and brush drag
- Good package viscosity development with small particle size latexes
- VOC-free
- Superior spatter resistance
- Good colour acceptance
- Bio-stable
- pH independent
- Pourable liquid for easy addition
- Compatible with other thickeners
- Does not detract from gloss or wet adhesion

INCORPORATION

RHEOLATE 222 can be used as supplied or, if necessary, further diluted with water. Addition can take place at any time during the formulation manufacturing process but incorporation into the millbase before letdown is recommended.

RHEOLATE 222 additive can be combined with other associative rheological additives, clay based thickeners or cellulosic thickeners for higher package viscosity and improved sag control.

RHEOLATE 222 is an associative rheological additive and is generally more efficient as the particle size of the latex emulsion decreases. This is due to the increased surface area of such emulsions. It is important to assess the effectiveness of **RHEOLATE 222** in the complete system, while performance is also affected by other raw ingredients.

LEVELS OF USE

Typical use levels of **RHEOLATE 222** are 0.5% to 5% (thickener solids weight) on total system weight.

RHEOLATE[®] 222

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

RHEOLATE 222 should be kept above 4°C (40°F). In the event of accidental freezing, thaw gently, spread a portion between glass slides and examine for granules. If found, do not use.

SHELF LIFE

RHEOLATE 222 has a 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.

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 2018, 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.

North America Elementis 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 2066 Fax: +49 221 2923 2011

www.elementis.com

V01 Sep. 2018

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