

RHEOLATE® 655

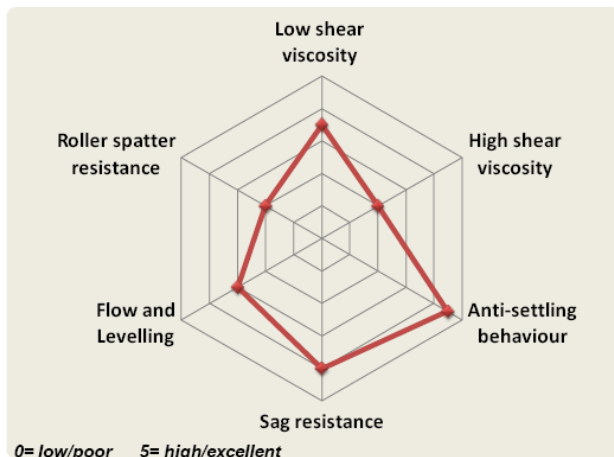
Associative rheological additive for low VOC formulations
Solvent-free, APE-free, tin-free, polyether urea polyurethane associative (HEUR)
thickener for latex paints and other waterborne coatings

GENERAL INFORMATION

RHEOLATE 655 is designed for use in low VOC latex systems.

RHEOLATE 655 provides thickening efficiency primarily in the medium-shear rate range (Stormer, KU) viscosity.

Waterborne paints requiring a range of mid (KU) to high-shear rate (ICI) viscosities can be formulated by combining **RHEOLATE 655** and high-shear rate thickeners like RHEOLATE 212.



CHEMICAL & PHYSICAL PROPERTIES

Appearance	cloudy off-white to white liquid
Active Solids	20%
Total Solids	27%
Brookfield Viscosity cps	< 8,000 (Brookfield RVT spindle 4, 20 rpm, 25°C)
Specific Gravity	1.05
Solvent	water

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

APPLICATIONS

- Gloss latex paints
- Satin-gloss latex paints
- Latex paints for interior and exterior applications, based on a wide range of binders
- Water-reducible paints
- Adhesives
- Inks

KEY PROPERTIES

RHEOLATE 655 rheological additive

- Low odour
- Enhances film build
- Provides effective flow and levelling control
- Reduces spattering during roller application
- pH-independent
- Easily incorporated
- Compatible with other rheological additives
- Allows broad formulating flexibility

INCORPORATION

RHEOLATE 655 is typically added just before the let-down or at the very end of the paint manufacturing process.

Care should be taken in sensitive formulations to avoid possible shock or de-stabilization.

In fine-particle or hydrophobic latex systems, when association can be strong, it is advisable to dilute the thickener first with an equal quantity of water.

In non-sensitive systems the additive can be incorporated at any convenient stage.

The combined use of **RHEOLATE 655** and RHEOLATE 212 allow the high-shear viscosity (drag-resistance) and low/medium-shear viscosity (flow and levelling) of a paint to be precisely adjusted.

RHEOLATE 655 can be combined with traditional additives, such as clays, cellulose or acrylic thickeners.

The rheological properties of associative thickeners are developed by interaction with the other ingredients in a given system. The thickening efficiency of **RHEOLATE 655** may be influenced by solvents, binders or surfactants.

LEVELS OF USE

The typical levels of use for **RHEOLATE 655** are 0.4 to 2.0 % (as delivered) by weight of the formulation. To achieve optimum properties the systems' surfactant blend may need modification. Advice is available on request.

continued...

RHEOLATE[®] 655

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

Stored **RHEOLATE 655** in a cool, dry location, and above 4 °C (40 °F).

In the event of accidental freezing, thaw gently, spread a portion between clean glass slides and examine for granules. If found, do not use.

SHELF LIFE

RHEOLATE 655 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.

V01 Aug. 2018

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

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