

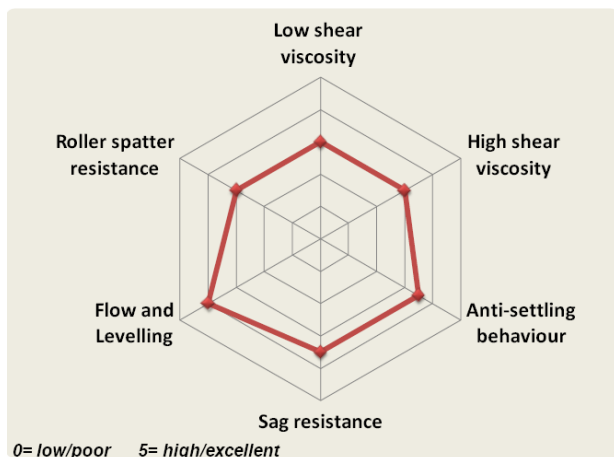
Associative Polyurethane-Based Thickener for Emulsion Paints

GENERAL INFORMATION

RHEOLATE[®] 278 is a 25 % solution designed for use in paints containing small-particle-size emulsions and high-volume-solids systems.

RHEOLATE[®] 278 is an additive with superior thickening efficiency in the high-shear range (ICI viscosity) – beyond that of other thickeners.

Emulsion paints with various ICI viscosities can be formulated by combining RHEOLATE[®] 255 and RHEOLATE[®] 278 or other rheological additives.



PHYSICAL PROPERTIES

Appearance	cloudy off-white to white liquid
Active Solids	25%
Total Solids	25%
Brookfield Viscosity	< 6,000
cps	(Brookfield RVT, spindle 4, 20 rpm, 25°C)
Specific Gravity	1.03
Solvent	water / butyl diglycol

APPLICATIONS

- Gloss emulsion paints
- Satin-gloss emulsion paints
- Emulsion paints for interior and exterior applications, based on pure acrylic or copolymer binders

KEY PROPERTIES

RHEOLATE[®] 278 rheological additive

excellent rheology

- gives superior high-shear viscosity
- enhances film build
- provides excellent brush drag

excellent paint performance

- imparts superior flow and leveling
- reduces spattering during roller application
- good color acceptance
- enzyme resistant
- develops pH-independent rheology
- gives alkyd-like appearance in water-borne gloss paints
- easily incorporated

compatibility

- compatible with BENTONE[®] EW, BENTONE[®] LT and other rheological additives
- allows broad formulating flexibility

INCORPORATION

RHEOLATE[®] 278 can be used as supplied or – in special cases – diluted. Addition can take place at any time during the paint manufacturing process. Addition before letdown of the mill-base is strongly recommended.

The combined use of RHEOLATE[®] 255 and RHEOLATE[®] 278 allows the high-shear viscosity (drag-resistance) and low/medium-shear viscosity (flow and levelling) of a paint to be precisely adjusted. This is achieved by the following method, using the two additives in varying proportions.

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 2006, 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.elementis-specialties-asia.com

B03 jul-14

Two paints are prepared independently to the desired medium-shear viscosity using, respectively, RHEOLATE[®] 255 and RHEOLATE[®] 278. The two paints are then mixed in varying proportions until the resultant blend has the required high-shear (ICI) viscosity. The amounts of RHEOLATE[®] 255 and RHEOLATE[®] 278 needed to achieve a given ICI viscosity can thus be accurately determined. RHEOLATE[®] additives can be combined with traditional additives such as BENTONE[®] LT, BENTONE[®] EW, cellulosic or acrylic thickeners. The thickening efficiency of RHEOLATE[®] 278 may be influenced by solvents, binders or surfactants. The rheological properties of these associative thickeners are developed by interaction with the other raw materials in a given system. It is therefore important to assess the effectiveness of RHEOLATE[®] 278 in the complete paint system.

LEVELS OF USE

The typical levels of use for RHEOLATE[®] 278 are 0.4 to 2.0 % by weight of the paint. To achieve optimum properties, the system's surfactant blend may need modification.

HANDLING AND SAFETY

Before using this product please consult our Material Safety Data Sheet (MSDS) for information on safe handling and storage.

STORAGE RECOMMENDATIONS

- Stored in a cool, dry location.
- Stored 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[®] 278 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.

Elementis Specialties

Asia Head Office China
Deuchem (Shanghai) Chemical Co., Ltd.
99, Liayang Road,
Songjiang Industrial Zone,
Shanghai, China 201613
Tel.: +86 21 57740348
Fax.: +86 21 57743563

Taiwan
Deuchem Co., Ltd.
92, Kuang-Fu North Road,
Hsinchu Industrial Park,
Hukou, Hsinchu, Taiwan
Tel.: +886 3 5984035
Fax.: +886 3 5983301

Malaysia
Elementis S.E.A. (Malaysia) Sdn. Bhd.
(1095769-X)
62-1, Jalan Tasik Utama 5,
Medan Niaga Tasik Damai,
Sungai Besi, 57000 Kuala Lumpur,
Wilayah Persekutuan, Malaysia
Tel.: +603-9054 6690
Fax.: +603-9054 6698

India
Elementis Specialties (India) Pvt. Ltd.
Unit B, Ground Floor,
Jaswanti Landmark,
Mehra Industrial Estate,
L.B.S Marg, Vikhroli (West),
Mumbai 400 079, India
Tel.: + 91 22 67421251
Fax: + 91 22 67421252