

RHEOLATE® 278

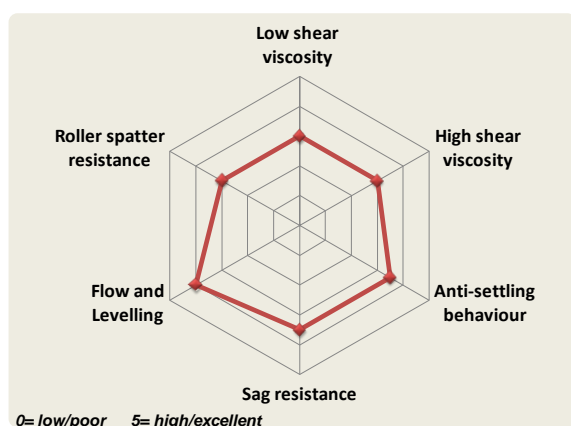
Associative Polyurethane-Based Thickener for Emulsion Paints

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.



CHEMICAL & PHYSICAL PROPERTIES

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

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

APPLICATIONS

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

KEY PROPERTIES

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.

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.

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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.

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

Store in a cool, dry location.

Store 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.

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.

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