

RHEOLATE® 678

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

GENERAL INFORMATION

RHEOLATE 678 is designed for use in waterborne paints based on a wide range of latex systems.

RHEOLATE 678 is an additive with superior thickening efficiency in both the mid- and high- shear rate ranges.

RHEOLATE 678 provides in-can viscosity and also improves brush-drag.

Waterborne paints with a wide range of various flow characteristics can be formulated by combining

RHEOLATE 678 with other Elementis rheological additives.

CHEMICAL & PHYSICAL PROPERTIES

Appearance	translucent off-white to white liquid
Active Solids	25%
Total Solids	32.5%
Brookfield Viscosity cps	< 10,000 (Brookfield RVT spindle 4, 20 rpm, 25°C)
Specific Gravity	1.06
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 variety of binders.
- Water-reducible paints
- Adhesives
- Inks

KEY PROPERTIES

- Low odor
- Balanced mid-and high-shear flow
- Enhances film build
- Provides excellent brush drag
- Imparts superior flow and levelling
- Reduces spattering during roller application
- Good color acceptance and stability

- Easily incorporated
- Compatible with all other rheological additives

INCORPORATION

RHEOLATE 678 is typically added just after the latex addition in the let-down. It is recommended that any low-shear thickener be added after **RHEOLATE 678** is added.

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.

RHEOLATE 678 additive can also be combined with other rheological additives to achieve ideal flow.

The rheological properties of associative thickeners are developed by interaction with the other raw materials in a given system. The thickening efficiency of **RHEOLATE 678** may be influenced in particular by some solvents, binders or surfactants.

LEVELS OF USE

Typical use levels of **RHEOLATE 678** are 0.4 % to 2.0 % (as delivered) by weight of the paint.

A ladder test may be run to determine the most suitable dosage before use.

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 **RHEOLATE 678** 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.

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SHELF LIFE

RHEOLATE 678 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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