

Associative rheological additive for low VOC formulations

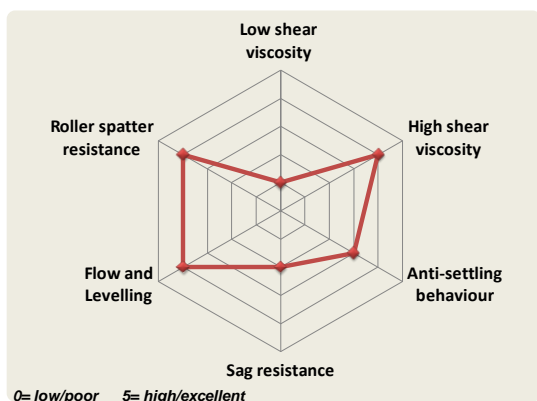
Solvent-free, APE-free, tin-free, polyether urea polyurethane associative (HEUR) thickener for latex paints and other waterborne coatings

GENERAL INFORMATION

RHEOLATE 644 is a 25% solids solution of a polyether urea polyurethane-based associative rheology modifier designed for use in waterborne paints and in low PVC systems.

RHEOLATE 644 provides efficient thickening in the high (ICI) and mid-shear viscosity (KU) ranges often without the need for a secondary thickener.

Tint-base pigmented systems benefit from the improved colour acceptance and paint stability achieved with RHEOLATE 644.



PHYSICAL PROPERTIES

Appearance	Cloudy white liquid
Active Solids	25% active solution (± 0.5%)
Viscosity	Max. 10,000 mPa·s Brookfield RVT spindle 3, 10 rpm
Density	1.05 g/cm ³

APPLICATIONS

- Gloss latex paints
- Satin-gloss latex paints
- High quality trim paints
- Latex paints for interior and exterior applications, based on a wide variety of binders.
- Water-reducible paints
- Adhesives
- Inks

KEY PROPERTIES

RHEOLATE 644 rheological additive

- Low odor
- Enhances film build
- Provides good brush drag
- Does not usually require the use of a secondary thickener
- Provides effective flow and levelling control
- Reduces spattering during roller application
- Excellent color acceptance and stability
- pH-independent
- Easily incorporated
- Compatible with other rheological additives

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INCORPORATION

RHEOLATE 644 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.

RHEOLATE 644 additive, although excellent alone for many high quality finishes, can be combined with other rheological additives such as cellulosics, clays 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 644 may be influenced by solvents, binders or surfactants.

LEVELS OF USE

The typical levels of use for RHEOLATE 644 are 0.4 to 3.0% (as delivered) by weight of the paint.

HEALTH AND SAFETY DATA

Before using this product please consult our Material Safety Data Sheet (MSDS) for information on safe handling and storage. MSDS can be found on the company website at www.elementis-specialties.com.

STORAGE RECOMMENDATIONS

Store RHEOLATE 644 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 644 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.

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