

## RHEOLATE® 644

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 644** is a 25% solids dispersion 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.

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

### CHEMICAL & PHYSICAL PROPERTIES

|                          |   |
|--------------------------|---|
| Appearance               | opaque 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
- 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

- Low odour
- Enhances film build
- Provides good brush drag
- Provides effective flow and levelling control
- Reduces spattering during roller application
- Excellent colour acceptance and stability
- pH-independent
- Easily incorporated
- Compatible with other rheological additives

### INCORPORATION

**RHEOLATE 644** is typically added just after the latex addition in the let-down. It is recommended that any low-shear thickener be added after **RHEOLATE 644** 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 644** additive can be combined with other rheological additives to achieve ideal flow.

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.

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

## RHEOLATE<sup>®</sup> 644

### 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 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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