

NPE-Free Rheological Additive for Latex Paints and Other Waterborne Systems

GENERAL INFORMATION

RHEOLATE[®] 475 is a solvent-free, hydrophobically modified alkali-soluble emulsion (HASE) rheology modifier for low and 0 VOC interior decorative coatings. This KU-building rheology modifier provides the balance of properties not typically found in acrylic chemistries such as excellent flow and leveling, good sag resistance and good color properties.

PHYSICAL PROPERTIES

These properties are typical but do not constitute specifications.

Composition	acrylic emulsion in water
Appearance	milky white liquid
Solids	30 %
Solvent	water
Density lb/gal (US)	8.77
Brookfield viscosity	max 20 mPa s at 22°C using an LVT#1 Spindle
pH value	< 5

KEY PROPERTIES

- Excellent paint appearance
- Very good application properties
- Low viscosity liquid
- Solvent and APEO free
- Excellent flow and leveling while maintaining sag resistance
- Good efficiency and spatter resistance
- Easy to handle and incorporate into manufacturing processes
- Low odor, low VOC applications

PERFORMANCE PROFILE

RHEOLATE[®] 475 has excellent KU efficiency across a wide range of chemistries. In many formulations the efficiency of RHEOLATE[®] 475 offers opportunities to lower costs without sacrificing performance. In tinted systems, RHEOLATE[®] 475 maintains excellent balance of leveling and sag resistance while offering good viscosity stability. This performance is evident across the wide range of binder chemistries used in the market today.

FORMULATING GUIDELINES

RHEOLATE[®] 475 may be used with a co-thickener to achieve the desired viscosity performance profile. For building high shear viscosity, RHEOLATE[®] 678 and RHEOLATE[®] 644 both complement RHEOLATE[®] 475 in a wide range of formulations. RHEOLATE[®] 678 is particularly suited for use in PVA and VAE based paints RHEOLATE[®] 644 is more compatible with low VOC acrylic based paints. The co-thickener should be added to the letdown prior to RHEOLATE[®] 475. RHEOLATE[®] 475 is an alkali-soluble emulsion and requires pH adjustment for complete activation. Paints should be formulated at pH 7.5 or higher to maximize the performance and efficiency. The wider pH compatibility of RHEOLATE[®] 475 will typically reduce the need for higher amine levels or alkali extenders.

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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INCORPORATION

It is recommended to dilute RHEOLATE[®] 475 with water (1:1 to 1:1.5) prior to addition. No pre-neutralization of RHEOLATE[®] 475 is required. Base, such as ammonium hydroxide or amino methyl propanol, should be added to the paint prior to the addition of RHEOLATE[®] 475. RHEOLATE[®] 475 can be added to the letdown or as a post addition as long as the paint is sufficiently alkaline during incorporation and enough agitation is available. RHEOLATE[®] 475 is supplied as a low viscosity liquid therefore easy to pump or pour and compatible with automated metering systems.

LEVELS OF USE

The typical levels of use for RHEOLATE[®] 475 are 0.1 % to 2.0 % (as delivered) by weight. A ladder test may be run to determine the most suitable dosage before use.

HANDLING AND SAFETY

More detailed information on handling and safety for RHEOLATE[®] 475 is included in the material safety data sheet.

STORAGE RECOMMENDATIONS

RHEOLATE[®] 475 should be kept above 4°C (40°F). In the event of accidental freezing, thaw gently, spread a portion between two glass slides and examine for granules. If found, do not use.

PACKAGING

Net Weight: 25/200 kg

SHELF LIFE

RHEOLATE[®] 475 has a shelf life of 24 months 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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