

RHEOLATE® 465

Rheological Additive for Latex paints and other Water-Borne Systems

GENERAL INFORMATION

RHEOLATE 465 is strongly hydrophobically modified alkali swellable acrylic thickener that demonstrates both ionic and associative thickening mechanisms with an excellent balance of the respective properties.

RHEOLATE 465 will provide both mid and high shear rate viscosity with balanced performance for superior package and application properties.

CHEMICAL & PHYSICAL PROPERTIES

Composition	proprietary HASE (hydrophobically modified alkali swellable emulsion)
Color / Form	milky white liquid
FX 1010	1.07 g/cm ³
pH	< 5.0
Brookfield Viscosity cps	< 20 (Brookfield LVT, spindle 1, 60 rpm, 25°C)
Non-Volatile Content	30.5%
Volatile	water

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

APPLICATIONS

Water-borne Architectural Coatings

- High PVC architectural systems
- High gloss and semi-gloss latex paints
- Low odor and low VOC coatings
- Matte latex paints
- Premium Interior/exterior deco coatings
- Contractor or trade paint systems
- Water reducible and latex systems

Industrial Coatings

- Coil and roller applied coatings
- Vacuum and curtain coatings
- Industrial maintenance coatings

KEY PROPERTIES

- Efficient mid and high shear build
- Excellent storage stability
- Alkyd-like flow and leveling
- Improved moisture resistance over other acrylic and cellulosic thickeners
- Excellent brush drag
- Improved hiding on roll-out
- Superior spatter resistance and flow and leveling versus acrylic and cellulosic thickeners

INCORPORATION

Proper Addition Techniques

In most cases **RHEOLATE 465** can be added to the system without dilution or pre-neutralization. It is most commonly added to the letdown, but a portion can also be incorporated into the millbase if a thixotropic grind is desired. Under very low shear mixing conditions dilution with water and/or glycol is recommended. **RHEOLATE 465** can also be post-added to adjust viscosity after quality control checks, or to correct product spoiled by biological degradation.

Proper pH Adjustment

RHEOLATE 465 is an alkali swellable thickener and should be used in systems with a pH of at least 7.5 for complete activation. In vinyl acrylic systems where pH has a tendency to drift downward, the use of calcium carbonate or wollastonite extenders may help maintain pH on aging. **RHEOLATE 465** is effective over a wider pH range than most HASE thickeners and will reduce the need for higher amine levels or alkali extenders.

Viscosity Equilibration

As in the case with all associative thickeners **RHEOLATE 465** requires time to activate fully after addition. The equilibration time will vary depending on formulation, but in most cases will be reached after 16 hours.

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LEVELS OF USE

The typical level of use in paints or inks for **RHEOLATE 465** is 0.3% to 1.0% (as delivered) by weight. Levels up to 9% can be used in adhesives and sealants.

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

RHEOLATE 465 should be kept above 5 °C (40 °F) and BELOW 40 °C (104 °F)

In the event of accidental freezing, thaw gently, spread between glass slides and examine for granules. If found, do not use.

SHELF LIFE

RHEOLATE 465 has a shelf life of (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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