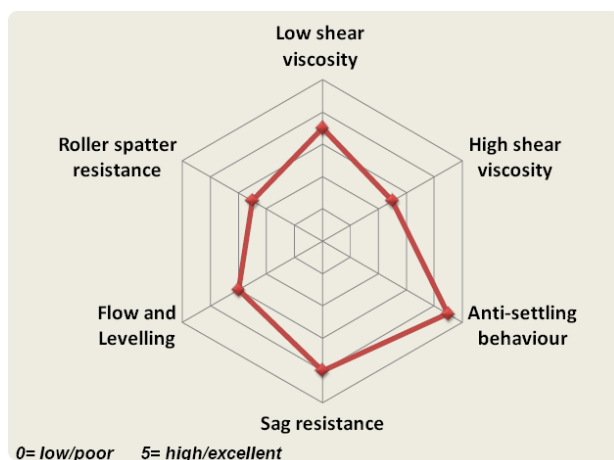


RHEOLATE[®] FX 1010

Associative Thickening Agent

GENERAL INFORMATION

RHEOLATE FX 1010 is a high efficiency polyether polyurethane thickener for use in aqueous coatings. The product is supplied as a liquid, is convenient to handle and ready for immediate use.



CHEMICAL & PHYSICAL PROPERTIES

Composition	hydrophobic urethane polymer in a mixture of solvents
Appearance, 20 °C	clear to slightly yellow color
Active content	50 %
Density, 20°C (ISO 2811-2)	approx. 1070 kg / m ³
Viscosity, 23 °C (ASTM D 2196)	9 - 14 Pa.s
Color, 50 % in IPA (DIN-EN 1557)	max. 125 Alpha
Solubility	soluble in water and water / glycol mixtures

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

APPLICATIONS

- **RHEOLATE FX 1010** is applicable in many aqueous systems such as emulsions, dispersions and emulsion paints e.g. based on polyacrylic-, polyvinyl-acetate homopolymers and most terpolymers. **RHEOLATE FX 1010** is recommended for a wide range of paint formulations, from gloss to matt finishes.
- **RHEOLATE SIN** improves the anti-settling and sag resistance of aqueous paints by increasing the mid and low shear viscosity.
- **RHEOLATE FX 1010** acts as a binding agent in the coating and is totally compatible with the standard latexes used in emulsion paints. Paints made with **RHEOLATE FX 1010** have a higher degree of water resistance and increased scrub resistance than those made with cellulosic thickeners. Higher gloss levels in gloss emulsion paints are obtained by using **RHEOLATE FX 1010** as opposed to polyacrylates or cellulosic thickeners. Combining **RHEOLATE FX 1010** with a suitable pigment dispersant such as **NUOSPERSE FX 600** gives outstanding gloss performance. For other emulsion paints we recommend the combination of **RHEOLATE FX 1010** and **NUOSPERSE FX 504**, for example.
- **RHEOLATE FX 1010** has excellent resistance to bacterial degradation and improves the viscosity stability, thus allowing a possible reduction in the level of preservative used.

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RHEOLATE® FX 1010

KEY PROPERTIES

FEATURE	CONSEQUENCE
<ul style="list-style-type: none"> based on a poly-ether polyurethane 	<ul style="list-style-type: none"> provides longterm viscosity stability improves weathering less sensitive to hydrolysis decreased water sensitivity
<ul style="list-style-type: none"> increases mid and high shear viscosity 	<ul style="list-style-type: none"> improved anti-settling properties and sag resistance
<ul style="list-style-type: none"> non-elastic flow 	<ul style="list-style-type: none"> reduces roller spattering

INCORPORATION

RHEOLATE FX 1010 may be added to the milling paste or during the let-down stage. Best results are obtained when using a part in the milling paste and a part during the let-down.

LEVELS OF USE

The quantity of **RHEOLATE FX 1010** to be used is strongly dependent on the desired rheology and the composition of the paint-system. In most cases a concentration of 0.2 - 2.0 % **RHEOLATE FX 1010** is sufficient. However, it is recommended to determine the optimum dosage for each case individually.

In some high PVC-formulations it may be useful to use **RHEOLATE FX 1010** in combination with cellulosic thickeners.

Dilution methods:

A. Addition to the pigment grind:

RHEOLATE FX 1010 as such can be incorporated together with the other liquid components of the mill-base.

B. Addition during let-down or as post-additive:

RHEOLATE FX 1010 should be diluted with a mixture of water/propyleneglycol or water alone.

Suggested possible dilution of **RHEOLATE FX 1010**:

RHEOLATE FX 1010	6 %	10 %	25 %
Propyleneglycol		35 %	37.5 %
water	94 %	55 %	37.5 %
	100 %	100 %	100 %

To make a 1 to 4 % solution we recommend first to make a 4 to 10 % solution and then dilute down to the lower concentration.

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.

SHELF LIFE

RHEOLATE FX 1010 has a shelf life of 3 (three) years from date of manufacture.

QUALITY ASSURANCE

Quality system at the site manufacturing this product complies with and is certified to ISO 9001 quality 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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