

RHEOBYK-L 1400 VF

VOC-free associative thickener (HEUR) for aqueous systems to generate a Newtonian flow behavior.

Product data

Composition

Solution of a polyurethane

VOC-free
(< 1500 ppm)

Typical properties

The values indicated in this data sheet describe typical properties and do not constitute specification limits.

Density (20 °C): 1.04 g/ml

pH value: 8 ± 1

Active substance: 20 %

Solvents: water

Storage and transportation

Mix well before use. Transport and store in a dry place, in an unopened original container, at temperatures between 5 °C and 35 °C.

Applications

Coatings industry

Special features and benefits

As a result of the Newtonian flow behavior, RHEOBYK-L 1400 VF has only a negligible impact on the low shear range and improves or increases the brushability. The additive also reduces spattering during application. Greater film thicknesses can be achieved along with an excellent balance between the flow properties and leveling. The additive is liquid and therefore easy to handle. It is not necessary to adjust the pH value or control the temperature during incorporation. When combined with rheology additives which are effective in the low shear range, such as the RHEOBYK-H series, it enables an optimum processability.

Recommended use

RHEOBYK-L 1400 VF is preferably used in emulsion paints and coatings that are based on acrylic, styrene acrylic, and vinyl acetate copolymer binders as well as in PU and alkyd emulsions and epoxy dispersions.

Architectural coatings	<input checked="" type="checkbox"/>
Wood and furniture coatings	<input checked="" type="checkbox"/>

☒ besonders empfohlen ☐ empfohlen

Recommended levels

1–3 % additive (as supplied) based upon the total formulation, depending on the properties of the formulation to be achieved.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions

Addition while stirring ensures optimum distribution and the best possible effectiveness and reproducibility in applications. RHEOBYK-L 1400 VF is suitable for adding to the millbase as well as to the letdown product, or as a post-additive to retroactively adjust the rheological properties.

Paper Coatings**Special features and benefits**

In paper coatings, RHEOBYK-L 1400 VF develops a considerable Newtonian flow behavior, thus very efficiently increasing the viscosity in the high shear range. This enables the adjustment of a flat rheology profile across a broad shear range.

Recommended use

The additive is compatible with all paper coating systems and can be used in association with all application techniques.

Recommended levels

0.5–3 % additive (as supplied) based upon the total formulation, depending on the properties of the formulation to be achieved.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions

The additive can be incorporated to adjust viscosity after production of the coating system with low to medium shear forces (post-addition).

Adhesives and sealants**Special features and benefits**

RHEOBYK-L 1400 VF increases the viscosity in the high shear range with an extremely low impact on the viscosity in the low shear range. With this Newtonian flow behavior it improves processability, leveling, and storage stability. The additive also reduces spattering during application. Higher film thicknesses can be achieved along with an excellent balance between the flow properties and stability. The additive is liquid and therefore easy to handle. It is not necessary to adjust the pH value or control the temperature during incorporation. When combined with rheology additives that are effective in the low shear range, such as the RHEOBYK-H series, it provides optimum processability.

Recommended use

RHEOBYK-L 1400 VF is preferably used in dispersion adhesives that are based on acrylic, styrene acrylic, and vinyl acetate copolymer resins, carboxylated styrene-butadiene latex as well as in PU and vinyl acetate homopolymers.

Recommended levels

1–4 % additive (as supplied) based upon the total formulation, depending on the properties of the formulation to be achieved.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions

Addition while stirring ensures optimum distribution and the best possible effectiveness and reproducibility in applications. RHEOBYK-L 1400 VF can be added directly to the formulation or as a post additive for the retroactive adjustment of the rheological properties.

Leather finishes and coated fabrics

Special features and benefits

As a result of the Newtonian flow behavior, RHEOBYK-L 1400 VF has only a negligible impact on the low shear range and improves or increases the leveling in reverse and synchro roller applications. Greater film thicknesses can be achieved along with an excellent balance between the flow properties and leveling. It can also be used in Top Skins applied on casting release papers to ensure optimal rheology control and leveling. The additive is liquid and therefore easy to handle. It is not necessary to adjust the pH value or control the temperature during incorporation. When combined with rheology additives which are effective in the low shear range, such as the RHEOBYK-H series, it enables optimum processability.

Recommended use

RHEOBYK-L 1400 VF is preferably used in emulsion paints and coatings that are based on acrylic, vinyl acetate copolymer binders as well as in PUDs.

Leather finishes	<input checked="" type="checkbox"/>
Coated fabrics	<input checked="" type="checkbox"/>

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Recommended levels

1–3 % additive (as supplied) based upon the total formulation, depending on the properties of the formulation to be achieved.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions

Addition while stirring ensures optimum distribution and the best possible effectiveness and reproducibility in applications. RHEOBYK-L 1400 VF is suitable for adding to the millbase as well as to the letdown product, or as a post-additive to retroactively adjust the rheological properties.



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