

RHEOBYK-7685

Bio-based associative thickener (HEUR) for aqueous systems to generate Newtonian flow behavior.

Product data

Composition

Solution of polyurethane

VOC-free (< 1500 ppm)
APEO-free
Tin-free

Typical properties

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

Density:	1.04 g/cm ³
pH value:	7
Active substance:	22.5 %
Solvent:	water
Bio-based carbon content (ASTM D6866):	95 %
Delivery form:	liquid

Storage and transportation

Product shelf life in unopened original packaging: 18 months

To be stored and transported at a temperature below 40 °C. Stir before use.

Applications

Coatings industry

Special features and benefits

- Rheological effect:
 - Viscosity increase in the high shear range
 - Very little impact on viscosity in the low shear range
- Improvement of:
 - Processability
 - Leveling
 - Storage stability
- Systems:
 - Aqueous
 - Aqueous UV-curable
- Reduces spattering during application
- Achieves higher film thicknesses along with an excellent balance between flow and leveling
- No negative impact on gloss, color acceptance, or rub-out
- Easy handling due to liquid delivery form
- Requires no special pH adjustment or temperature control during incorporation
- Can be combined with rheology additives that are effective in the low shear range

Recommended use

RHEOBYK-7685 is preferably used in aqueous emulsion paints and coatings that are based on acrylate, styrene acrylate, and vinyl acetate copolymer binders, as well as in PU and alkyd emulsions.

Architectural coatings	<input checked="" type="checkbox"/>
General industrial coatings	<input checked="" type="checkbox"/>
Floor coatings	<input checked="" type="checkbox"/>
Wood and furniture coatings	<input type="checkbox"/>
Marine and protective coatings	<input type="checkbox"/>

especially recommended recommended

Recommended levels

1-4 % additive (as supplied) based on 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 under stirring ensures optimum distribution and the best possible effectiveness and reproducibility in applications. RHEOBYK-7685 is suitable for adding to the millbase, to the letdown, or as a post-additive to retroactively adjust the rheological properties.

Adhesives and sealants**Special features and benefits**

- Rheological effect:
 - Viscosity increase in the high shear range
 - Very little impact on viscosity in the low shear range
- Improvement of:
 - Processability
 - Leveling
 - Storage stability
- Systems:
 - Aqueous
- Reduces spattering during application
- Achieves higher film thicknesses along with an excellent balance between flow and leveling
- Easy handling due to liquid delivery form
- Requires no special pH adjustment or temperature control during incorporation
- Can be combined with rheology additives that are effective in the low shear range

Recommended use

RHEOBYK-7685 is suitable for use in high-polar and aqueous binder systems.

Recommended levels

0.5-4 % additive (as supplied) based on 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 under stirring ensures optimum distribution and the best possible effectiveness and reproducibility in applications. RHEOBYK-7685 is suitable for direct addition to the formulation or as a post-additive to retroactively adjust the rheological properties.

Leather finishes and coated fabrics**Special features and benefits**

- Rheological effect:
 - Viscosity increase in the high shear range
 - Very little impact on viscosity in the low shear range
- Improvement of:
 - Processability
 - Leveling
 - Storage stability
- Systems:
 - Aqueous
- Especially suitable for blade applications on release papers or by rotogravure applications
- Reduces spattering during spray application
- Achieves higher film thicknesses along with an excellent balance between flow and leveling
- No negative impact on gloss or color acceptance
- Easy handling due to liquid delivery form
- Requires no special pH adjustment or temperature control during incorporation

Recommended use

RHEOBYK-7685 is preferably used in aqueous PU, acrylate, and vinyl acrylate systems.

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

especially recommended recommended

Recommended levels

1-6 % additive (as supplied) based on 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 under stirring ensures optimum distribution and the best possible effectiveness and reproducibility in applications. RHEOBYK-7685 is suitable for adding to the millbase, to the letdown, or as a post-additive to retroactively adjust the rheological properties.

Paper coatings**Special features and benefits**

- Rheological effect:
 - Viscosity increase in the high shear range
 - Very little impact on viscosity in the low shear range
- Improvement of:
 - Processability
- Allows the coating to remain pourable

Recommended use

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

Recommended levels

1-6 % additive (as supplied) based on 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 at any stage of the formulation process to adjust viscosity. It is particularly suited for addition after production of the coating system with low to medium shear forces (post-addition).



Your local
contact

BYK-Chemie GmbH

Abelstraße 45
46483 Wesel
Germany
Tel +49 281 670-0
info@byk.com
www.byk.com



Download
our app:
byk.com/app

ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK-AQUAGEL®, BYK-DYNWET®, BYK-MAX®, BYK-SILCLEAN®, BYKANOL®, BYKCARE®, BYKETOL®, BYKJET®, BYKONITE®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, NANOBYK®, OPTIBENT®, OPTIGEL®, PURABYK®, RECYCLOBYK®, RHEOBYK®, SCONA®, SILBYK®, TIXOGEL® and VISCOBYK® are registered trademarks of the BYK group.

The information contained herein is based on our current knowledge and experience. No warranties, guarantees and/or assurances of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding any products mentioned herein and data or information set forth, or that such products, data or information may be used without infringing intellectual property rights of third parties. Any information about suitability, use or application of the products is non-binding and does not constitute a commitment regarding the products' properties, use or application. Contractual terms and conditions, in particular agreed product specifications, always take precedence. We recommend that you test our products in preliminary trials to determine their suitability for your intended purpose prior to use. We reserve the right to make any changes and to update the information herein without notice.