

# RHEOBYK-7691

Solid, non-dusting, biocide-, and VOC-free associative thickener (HEUR) for aqueous systems that generates a Newtonian flow behavior.

## Product data

### Composition

Polyurethane

Biocide-free  
VOC-free

### Typical properties

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

Density: 1.20 g/cm<sup>3</sup>  
Loose bulk density: 0.4–0.6 g/cm<sup>3</sup>  
Melting point: 61 °C  
Appearance: flakes  
Color: off-white

### Storage and transportation

Storage at max. 35 °C.

## Applications

### Coatings industry

#### Special features and benefits

RHEOBYK-7691 increases the viscosity in the high shear range with an extremely low impact in the low shear range.

- Improvement of:
  - Processability
  - Leveling
  - Storage stability
  - Brush resistance
- Reduced spattering during application
- Achieves higher film thicknesses along with an excellent balance between flow and leveling
- No negative impact on gloss and color acceptance
- Supplied as solid flakes to prevent dust formation and to increase application safety
- No need to add biocides to the additive to avoid microbial infestation

Special pH value adjustment and temperature control during incorporation not required. Combination with rheology additives that are effective in the low shear range, such as RHEOBYK-7650, leads to optimized storage stability and processability.

**Recommended use**

Emulsion paints and coatings that are based on acrylic, styrene acrylate, vinyl acetate, PU, and epoxy dispersions, as well as alkyd emulsions.

Architectural coatings	■
Wood and furniture coatings	■
General industrial coatings	■
Marine and protective coatings	■
Floor coatings	■

■ especially recommended   □ recommended

**Recommended levels**

0.3–0.8 % 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**

Incorporation while stirring ensures optimum distribution and the best possible effectiveness and reproducibility in applications.

RHEOBYK-7691 is perfectly suitable for adding to the millbase and improving dispersibility. It can also be used as a post-additive, but this requires a slightly longer incorporation time (no high shear forces) compared with conventional liquid polyurethane thickeners. A 15 % pregel solution is easy to manufacture and enables an optimized post-addition.

When used in clearcoats, it is recommended that the additive is stirred into water at the start of the manufacturing process, and that further formulation components, such as binders, etc., are then added while stirring.

**Adhesives and sealants****Special features and benefits**

RHEOBYK-7691 increases the viscosity in the high shear range with an extremely low impact in the low shear range.

- Reduced spattering during application
- Higher film thicknesses can be achieved while at the same time maintaining good leveling
- Supplied as solid flakes to prevent dust formation and to increase application safety
- No need to add biocides to the additive to prevent microbial infestation
- Special pH value adjustment and temperature control during incorporation not required

Combination with rheology additives that are effective in the low shear range, such as RHEOBYK-7650, leads to optimized storage stability and processability.

**Recommended use**

RHEOBYK-7691 is suitable for use in highly polar and aqueous binder systems.

**Recommended use**

0.3–0.8 % 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**

Incorporation while stirring ensures optimum distribution and the best possible effectiveness and reproducibility in applications. RHEOBYK-7691 can also be used as a post-additive, but this requires a slightly longer incorporation time (no high shear forces) compared with conventional liquid polyurethane thickeners. A 15 % pregel solution is easy to manufacture and enables an optimized post-addition.



Download  
our app:  
[byk.com/app](https://byk.com/app)



Your local  
contact

**BYK-Chemie GmbH**

Abelstraße 45  
46483 Wesel  
Germany  
Tel +49 281 670-0

[info@byk.com](mailto:info@byk.com)  
[www.byk.com](http://www.byk.com)

ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK-AQUAGEL®, BYK-DYNWET®, BYK-MAX®, BYK-SILCLEAN®, BYKANOL®, BYKCARE®, BYKETOL®, BYKJET®, BYKONITE®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAC®, 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.