Data sheet Issue 24/01/2025

# **PURABYK-R 5531**

Liquid rheology additive to create a thixotropic flow behavior in aqueous and polar solvent-based systems. Particularly recommended for generating anti-settling properties and vertical cling on surfaces in detergents, cleaning and care products.

## **Product data**

## Composition

Solution of modified urea

#### **Typical properties**

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

Density: 1.18 g/cm³
Active substance: 42 %
Solvent: amide ether
Flash point: 126 °C

### **Storage and transportation**

Product is hygroscopic. Store dry. Minor turbidity of the material that occurs during storage has no influence on the rheological effectiveness. If handled and stored properly, the storage stability specified upon delivery applies in the unopened container.

## **Applications**

## Home Care and I&I

#### **Special features and benefits**

After being incorporated into the system, the additive generates a three-dimensional network structure. The resulting thixotropic flow behavior is optimally suited to preventing particles (e.g. encapsulated fragrances) from settling without affecting the residual emptying of the container. Cleaning products with PURABYK-R 5531 are easy to use and can be applied by spraying. The use of the additive improves adhesion to vertical surfaces, which enhances the cleaning action as a result of the longer exposure time.

The additive is liquid and therefore easy to handle. It is not necessary to specifically adjust the pH value or control the temperature during incorporation.

PURABYK-R 5531 is stable to acids and bases in a pH range of 0–13. The electrolyte resistance and compatibility with surfactants, including cationic ones, are excellent. Detergents and cleaning products retain their transparency.

Data sheet Issue 24/01/2025

#### Recommended use

PURABYK-R 5531 is used as a rheology additive to improve the run-off and settling properties in aqueous and polar solvent based detergents, cleaning and care products.

Acidic household cleaners	
Acidic toilet cleaners	
Glass and window cleaners	
Liquid detergents	
Fabric softeners	
All-purpose cleaner	
Hand dishwash detergents	

especially recommended

#### **Recommended levels**

0.1–2.0 % 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 under controlled stirring ensures optimum distribution and the best possible effectiveness and reproducibility in applications. It is not necessary to specifically control the temperature or adjust the pH value. The additive is also suitable for adjusting the viscosity afterwards by post addition. If an inhomogeneous appearance occurs, the use of common water-miscible solvents (e.g. alcohols, ketones, glycols, esters) will bring about an improvement.





BYK-Chemie GmbH

Abelstraße 45 46483 Wesel Germany Tel +49 281 670-0 info@byk.com www.byk.com ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK-AQUAGEL®, BYK®-DYNWET®, BYK-MAX®, BYK®-SILCLEAN®, BYKANOL®, BYKCARE®, BYKETOL®, BYKONITE®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAK®, 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 undate the information herein without notice.