

## BYK-307

Silicone-containing surface additive for solvent-free and solvent-borne coating systems, printing inks and adhesive systems, with strong reduction of surface tension. Very good substrate wetting, prevents cratering, and increases surface slip. Solvent-free alternative to BYK-306.

### Product Data

#### Composition

Polyether-modified polydimethylsiloxane

#### Typical Properties

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

Density (20 °C): 1.03 g/ml

#### Food Contact Legal Status

For the current food contact legal status, please contact our product safety department or visit [www.byk.com](http://www.byk.com) for further information.

### Applications

#### Printing Inks and Overprint Varnishes

##### Special Features and Benefits

The additive provides a strong reduction of surface tension of the system. Thus, it especially improves substrate wetting and prevents cratering. Furthermore, it increases surface slip and gloss. BYK-307 is a highly effective silicone additive for wetting critical substrates, and due to its being solvent-free, it is preferred in systems in which a solvent-free additive is requested, or where intermediate products require specific solvents.

##### Recommended Use

Recommended for all printing inks and overprint varnishes.

##### Recommended Levels

0.1-1.0 % additive (as supplied) based upon total formulation.

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

##### Incorporation and Processing Instructions

The additive can be incorporated during any stage of the production process, including post-addition. Dilution prior to incorporation can be helpful for easier dosing.

### Special Note

Unlike so-called silicone oils, this additive is very user-friendly. Nevertheless, it should be determined in a series of tests whether foam is stabilized in certain systems. Similarly, the recoatability and cratering should be checked.

## Coatings Industry

### Special Features and Benefits

The additive provides a strong reduction of surface tension of the coating system, and is a highly effective silicone additive for wetting critical substrates. It prevents cratering, and increases gloss and surface slip. BYK-307 has a property profile comparable to that of BYK-306, and due to its being solvent-free, it is especially useful in systems in which a solvent-free additive is requested, or where intermediate products require specific solvents.

### Recommended Use

The additive is especially recommended for all solvent-borne coatings, and can also be used in aqueous systems.

### Recommended Levels

0.01-0.15 % additive (as supplied) based upon total formulation.

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

### Incorporation and Processing Instructions

The additive can be incorporated during any stage of the production process, including post-addition. Dilution prior to incorporation can be helpful for easier dosing.

### Special Note

Unlike so-called silicone oils, this additive is very user-friendly. Nevertheless, it should be determined in a series of tests whether foam is stabilized in certain systems. Similarly, the recoatability and cratering should be checked.

## Adhesives & Sealants

### Special Features and Benefits

BYK-307 is a highly effective silicone additive, and provides a strong reduction of surface tension. In this way, it improves the wetting of critical substrates.

### Recommended Use

It is recommended for improving the substrate wetting in adhesive systems based on polyurethanes, epoxides, and acrylates.

### Recommended Levels

0.01-0.15 % additive (as supplied) based upon total formulation.

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

### Incorporation and Processing Instructions

The additive can be incorporated during any stage of the production process, including post-addition.

### Special Note

Unlike so-called silicone oils, this additive is very user-friendly. Nevertheless, the effect on adhesive properties must be tested.

## BYK-307

Data Sheet  
Issue 11/2012

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This issue replaces all previous versions – Printed in Germany