

# BYK-346

Silicone surfactant for aqueous coatings, printing inks and overprint varnishes with strong reduction in surface tension resulting in significantly improved substrate wetting. No increase in surface slip. Solution of BYK-345.

## Product Data

### Composition

Solution of a polyether-modified polysiloxane

### Typical Properties

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

Active substance:	52 %
Density (68 °F):	8.30 lbs/US gal
Non-volatile matter (10 min., 302 °F):	45 %
Solvents:	Dipropylene glycol monomethylether (48 %)
Flash point:	178 °F

### 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.

### Special Note

Solution of BYK-345. The difference between the amount of active substance and non-volatile matter is due to the synthesis-related excess of low molecular weight polyethers which is determined with our test method as part of the volatile content. The additive has long-term stability at pH 4 to 10. It requires a small amount of co-solvent in the formulation (approx. 5 % of the total solvent content) in order to avoid turbidity. The effectivity of the silicone surfactant is reduced in systems with higher co-solvent amounts. For these types of formulations we recommend the use of polysiloxanes such as BYK-333.

## Applications

### Coatings and Printing Inks

#### Special Features and Benefits

The additive provides a large decrease in surface tension in aqueous systems and therefore improves substrate wetting and leveling in particular. Foam stabilization does not occur or only very minimally and recoatability is not affected. The additive does not increase surface slip. If higher surface slip is desired, we recommend combining it with a polysiloxane such as BYK-333.

**Recommended Use**

The additive is recommended for all aqueous coatings, printing inks and overprint varnishes which contain a small proportion of organic co-solvent.

**Recommended Levels**

0.1-1 % additive (as supplied) based upon total formulation.

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

**Incorporation and Processing Instructions**

The additive is preferably added to the finished formulation. It can, however, be added at any stage during production.