

# BYK-320

Silicone-containing surface additive for solvent-borne coating systems with a slight reduction of surface tension and slight increase of surface slip. Good leveling with defoaming properties; also recommended for ambient curing plastic systems.

## Product Data

### Composition

Solution of a polyether-modified polymethylalkylsiloxane

### Typical Properties

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

Density (20 °C):	0.86 g/ml
Non-volatile matter (60 min., 105 °C):	52 %
Solvents:	White spirit/Methoxypropylacetate 9/1
Flash point:	38 °C

### 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

### Coatings Industry

#### Special Features and Benefits

The additive provides a slight reduction of the surface tension of coating systems and is a leveling additive with defoaming properties, particularly for non-polar to medium polar systems. Its defoaming effect intensifies with increasing polarity. BYK-320 prevents problems with ghosting and telegraphing. To prevent these defects, the additive must be used in the coating layer that is to be recoated.

#### Recommended Use

The additive is particularly recommended for solvent-borne coatings; however, it can also be used in aqueous systems.

#### Recommended Levels

0.05-0.6 % 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, before use it should be determined in a series of tests whether foam is stabilized in certain systems. Similarly, the recoatability and cratering should be checked.

**Ambient-curing Plastic Systems****Special Features and Benefits**

The additive provides a slight reduction of the surface tension and is a leveling additive with defoaming properties, particularly for non-polar to medium-polar systems. Its defoaming effect intensifies with increasing polarity.

**Recommended Use**

The additive is recommended for all ambient curing resin systems such as unsaturated polyester resins and epoxy resins.

**Recommended Levels**

0.05-0.6 % 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.



Additive Guide



**BYK-Chemie GmbH**  
P.O. Box 10 02 45  
46462 Wesel  
Germany  
Tel +49 281 670-0  
Fax +49 281 65735

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

ANTI-TERRA®, BYK®, BYK®-DYNWET®, BYK®-SILCLEAN®, BYKANOL®, BYKETOL®, BYKJET®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, DISPERBYK®, DISPERPLAST®, LACTIMON®, NANOBYPK®, PAPERBYK®, SILBYK®, VISCOBYK®, and Greenability® are registered trademarks of BYK-Chemie. ACTAL®, ADJUST®, ADVITROL®, ASTRABEN®, BENTOLITE®, CLAYTONE®, CLOISITE®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, LAPONITE®, MINERAL COLLOID®, OPTIBENT®, OPTIFLO®, OPTIGEL®, PURE THIX®, RHEOCIN®, RHEOTIX®, RIC-SYN®, TIXOGEL®, and VISCOSEAL® are registered trademarks of BYK Additives. AQUACER®, AQUAMAT®, AQUATIX®, CERACOL®, CERAFK®, CERAFLOUR®, CERAMAT®, CERATIX®, HORDAMER®, and MINERPOL® are registered trademarks of BYK-Cera. SCONA® is a registered trademark of BYK Kometra.

The information herein is based on our present knowledge and experience. The information merely describes the properties of our products but no guarantee of properties in the legal sense shall be implied. We recommend testing our products as to their suitability for your envisaged purpose prior to use. No warranties 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. We reserve the right to make any changes according to technological progress or further developments.

This issue replaces all previous versions – Printed in Germany