

Data Sheet Issue 11/2012

# **BYK-306**

Silicone-containing surface additive for ambient curing plastic systems and solvent-borne coating systems with a strong reduction of surface tension. Excellent substrate wetting, prevents cratering and increases surface slip.

## **Product Data**

#### Composition

Solution of a polyether-modified polydimethylsiloxane

## **Typical Properties**

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

Density (68 °F): 7.74 lbs/US gal

Non-volatile matter (30 min., 302 °F): 12.5 %

Solvents: Xylene/Monophenyl glycol 7/2

Flash point: 77 °F

## **Food Contact Legal Status**

For the current food contact legal status, please contact our product safety department or visit www.byk.com for further information.

#### **Storage and Transportation**

Separation or turbidity may occur at temperatures below 5 °C (41 °F). Warm to 20 °C (68 °F) and mix well.

# **Applications**

#### **Ambient Curing Plastic Systems**

## **Special Features and Benefits**

BYK-306, a highly effective silicone additive, provides a strong reduction of surface tension. It thereby improves the wetting of critical substrates. In pigmented systems it can prevent the formation of Bénard cells and improve leveling.

#### **Recommended Use**

BYK-306 is recommended for polyurethane and epoxy systems.

#### **Recommended Levels**

0.1-0.5 % 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.



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## **Incorporation and Processing Instructions**

The additive can be incorporated during any stage of the production process, including post-addition. It has proven successful to add the additive at the end of the process to avoid any foam stabilization.

#### **Special Note**

Unlike silicone oils, this additive is very user friendly. Nevertheless, before use it should be determined in series testing, whether surface defects occur in certain systems.

# **Coatings Industry**

#### **Special Features and Benefits**

The additive provides a strong reduction of the surface tension of the coating systems and is a highly effective silicone additive for wetting critical substrates. BYK-306 improves the acceptance of dust and spray mist and increases surface slip. It reduces air draft sensitivity in wood and furniture coatings and promotes the orientation of matting agents.

#### **Recommended Use**

The additive can be used in all solvent-borne systems.

#### **Recommended Levels**

0.1-0.5 % 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 before incorporation can make it easier to dose.

#### **Special Note**

Unlike 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.