

BYK-3765

Silicone-containing surface additive for solvent-borne coating systems and thermosets with a strong reduction of surface tension. Improves 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 (20 °C):	1.01 g/ml
Non-volatile matter (30 min, 150 °C):	11.5 %
Solvents:	Methoxypropylacetate/monophenyl glycol 3.3/1
Flash point:	50 °C

SVHC label-free
(EU SDS)
Aromatic-free*
Tin-free

Storage and transportation

Separation or turbidity may occur at temperatures below 5 °C. Warm to 20 °C and mix well.

Special note

BYK-3765 is a low-cycle and aromatic-free* version of BYK-306. The cyclic siloxane content D4/D5/D6 is in each case less than 0.1 %, therefore the SVHC label is not required in the safety data sheet.

Applications

Coatings industry

Special features and benefits

The additive provides a strong reduction in the surface tension of the coating systems and is a highly effective silicone additive for wetting critical substrates. BYK-3765 improves the acceptance of dust and spray mist and increases surface slip. It reduces sensitivity to air drafts in wood and furniture coatings and promotes the orientation of matting agents.

Recommended use

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

* Contains no intentionally added benzene, toluene, or xylene solvents.

Recommended levels

0.1–0.5 % additive (as supplied) based on the total formulation.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

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. However, before use, one should determine in a test series whether the foam is stabilized in certain systems and check the recoatability and crater tendency.

Thermosets**Special features and benefits**

As a highly effective silicone additive, BYK-3765 provides a strong reduction in the surface tension, thereby improving the wetting of critical substrates. In pigmented systems, it can prevent the formation of Bénard cells and improve leveling.

Recommended use

BYK-3765 is recommended for polyurethane and epoxy systems.

Recommended levels

0.1–0.5 % additive (as supplied) based on the total formulation.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

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. However, before use, one should determine in a test series whether surface defects occur in certain systems.



**Your local
contact**

BYK-Chemie GmbH
Abelstraße 45
46483 Wesel
Germany
Tel +49 281 670-0
Fax +49 281 65735

info@byk.com
www.byk.com

ADD-MAX®, ADD-VANCE®, ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK-AQUAGEL®, BYK-DYNWET®, BYK-MAX®, BYK-SILCLEAN®, BYKANOL®, BYKCARE®, BYKETOL®, BYKJET®, BYKO2BLOCK®, BYKONITE®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, MINERPOL®, NANOBYK®, OPTIBENT®, OPTIFLO®, OPTIGEL®, POLYAD®, PRIEX®, PURABYK®, PURE THIX®, RECYCLOBLEND®, RECYCLOBYK®, RECYCLOSSORB®, RECYCLOSTAB®, RHEOBYK®, RHEOCIN®, RHEOTIX®, SCONA®, SILBYK®, TIXOGEL® and VISCOBYK® are registered trademarks of the BYK group.

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.