BYK-314

Silicone-containing surface additive for solvent-borne coating systems with a strong reduction of surface tension. Improves substrate wetting, prevents cratering, and increases surface slip. Particularly suitable for baking systems and thermally stable up to 230 °C.

Product data

Composition
Solution of a polyester-modified polydimethylsiloxane

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

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
Non-volatile matter (30 min, 150 °C):	15 %
Solvents:	Methoxypropylacetate/monophenyl glycol 1.4/1
Flash point:	45 °C

Storage and transportation
To be stored and transported at a temperature below 40 °C. Separation or turbidity may occur at temperatures below 0 °C. Warm to 20 °C and mix well.

Special note
BYK-314 is a tin- and aromatic-free* version of BYK-310.

Applications

Coatings industry

Special features and benefits
BYK-314 provides a strong reduction in the surface tension of coating systems. It therefore especially improves substrate wetting and prevents cratering. Surface slip and gloss are also increased. BYK-314 also provides very good leveling properties, even with thin layers.

BYK-314 is a thermally stable silicone additive that, in contrast to conventional silicones, shows no thermal decomposition at temperatures between 150 °C and 230 °C. Consequently, when re-coating, no loss in adhesion and no surface defects occur, which can be caused by the decomposition products of conventional silicones above 150 °C. The additive is HAPS- and aromatic-free*.

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

Recommended use

Can coatings	■
Coil coatings	■
Industrial coatings	■
Automotive OEM coatings	■
Wood and furniture coatings	■

■ especially recommended □ recommended

Recommended levels

0.05-0.5 % 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.

Special note

Unlike silicone oils, this additive is very user-friendly. However, before use, one should determine in test series whether foam is stabilized in certain systems. Similarly, the recoatability, the migration of the silicone in stacked sheets as well as cratering should be checked.

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

info@byk.com
www.byk.com