

BYK-313

Silicone-containing surface additive for solvent-borne coating systems with a strong reduction in the surface tension. Excellent substrate wetting, prevents cratering and increases surface slip. Particularly suitable for baking systems, thermally stable up to 446 °F. Aromatic-free variant of BYK-310.

Product Data

Aromatic-free

Composition

Solution of a polyester-modified polydimethylsiloxane.

Typical Properties

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

Density (68 °F):	8.18 lbs/US gal
Non-volatile matter (10 min., 302 °F):	15 %
Solvents:	Methoxypropylacetate
Flash point:	113 °F

Food Contact Legal Status

This additive is suitable for applications with food contact. 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.

Special Note

BYK-313 is the aromatic-free variant of BYK-310.

Applications

Coatings Industry

Special Features and Benefits

The additive 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-313 also provides very good leveling properties, even with thin layers. BYK-313 is a thermally stable silicone additive which, in contrast to conventional silicones, shows no thermal decomposition at temperatures between 302 °F and 446 °F. 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 302 °F. The additive is HAPS and aromatic-free.

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Recommended Use

The additive is particularly recommended for all solvent-borne coatings.

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

■ especially recommended

Recommended Levels

0.05-0.5 % additive (as supplied) based on the 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. 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.



Additive Guide



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