

BYK-307

Silicone-containing surface additive for solvent-free and solvent-borne coating systems, printing inks and adhesive systems, with strong reduction of surface tension. Very good substrate wetting, prevents cratering, and increases surface slip. Solvent-free alternative to BYK-306.

Product Data

Composition

Polyether-modified polydimethylsiloxane

Typical Properties

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

Density (68 °F): 8.60 lbs/US gal

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.

Applications

Printing Inks and Overprint Varnishes

Special Features and Benefits

The additive provides a strong reduction of surface tension of the system. Thus, it especially improves substrate wetting and prevents cratering. Furthermore, it increases surface slip and gloss. BYK-307 is a highly effective silicone additive for wetting critical substrates, and due to its being solvent-free, it is preferred in systems in which a solvent-free additive is requested, or where intermediate products require specific solvents.

Recommended Use

Recommended for all printing inks and overprint varnishes.

Recommended Levels

0.1-1.0 % 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 prior to incorporation can be helpful for easier dosing.

Special Note

Unlike so-called silicone oils, this additive is very user-friendly. Nevertheless, it should be determined in a series of tests whether foam is stabilized in certain systems. Similarly, the recoatability and cratering should be checked.

Coatings Industry

Special Features and Benefits

The additive provides a strong reduction of surface tension of the coating system, and is a highly effective silicone additive for wetting critical substrates. It prevents cratering, and increases gloss and surface slip. BYK-307 has a property profile comparable to that of BYK-306, and due to its being solvent-free, it is especially useful in systems in which a solvent-free additive is requested, or where intermediate products require specific solvents.

Recommended Use

The additive is especially recommended for all solvent-borne coatings, and can also be used in aqueous systems.

Recommended Levels

0.01-0.15 % 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 prior to incorporation can be helpful for easier dosing.

Special Note

Unlike so-called silicone oils, this additive is very user-friendly. Nevertheless, it should be determined in a series of tests whether foam is stabilized in certain systems. Similarly, the recoatability and cratering should be checked.

Adhesives & Sealants

Special Features and Benefits

BYK-307 is a highly effective silicone additive, and provides a strong reduction of surface tension. In this way, it improves the wetting of critical substrates.

Recommended Use

It is recommended for improving the substrate wetting in adhesive systems based on polyurethanes, epoxides, and acrylates.

Recommended Levels

0.01-0.15 % 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, the effect on adhesive properties must be tested.

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