BYK-333

Silicone-containing surface additive for solvent-free, solvent-borne and aqueous coating systems, printing inks and adhesive systems as well as ambient curing plastic systems. Strong reduction of surface tension.

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): 8.68 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.

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

Coating and Printing Ink Industry

Special Features and Benefits
The additive provides a strong reduction of the surface tension of the coatings and printing inks. It therefore particularly improves substrate wetting and avoids cratering. Surface slip and gloss are also increased. In aqueous systems it improves the anti-blocking properties.

Recommended Use
The additive is particularly recommended for all solvent-borne, solvent-free and aqueous coatings, printing inks and overprint varnishes.

Recommended Levels
0.05-0.3 % additive (as supplied) based upon total formulation. In aqueous and UV systems up to 1 %.

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests. Dilution before processing can make it easier to dose.

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. 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-333 is a highly effective silicone additive. It provides a strong reduction of surface tension, thereby improving the wetting of critical substrates.

Recommended Use
It is particularly recommended for improving the substrate wetting of adhesive systems based on polyurethanes, epoxies and acrylates.

Recommended Levels
0.05-0.3 % 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 silicone oils, this additive is very user-friendly. Nevertheless, its influence on the adhesive properties should be checked.

Ambient-curing Plastic Systems

Special Features and Benefits
BYK-333 is a highly effective silicone additive. It provides a strong reduction of surface tension, thereby improving the wetting of critical substrates.

Recommended Use
It is particularly recommended for improving the substrate wetting of ambient-curing polyurethane and epoxy based systems.

Recommended Levels
0.05-0.3 % 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. It has proven successful to add the additive at the end of the process to avoid any foam stabilization.

Special Note
In comparison with silicone oils, this additive is very user-friendly. Nevertheless, it should be determined in a series of tests, whether surface defects occur in certain systems.

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