

BYK-094

VOC-free silicone-containing defoamer for aqueous systems. All purpose and easy to incorporate.

Product data

Composition

Blend of polyether-modified polysiloxanes and polyethers with hydrophobic particles

VOC-free (< 1500 ppm)

Typical properties

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

Density (20 °C): 1.03 g/cm³ Color: gray - light yellow

Delivery form: dispersion

Storage and transportation

To be stored and transported between 0 °C and 50 °C. Separation may occur. Stir before use.

Applications

Printing inks

Special features and benefits

BYK-094 is particularly recommended for defoaming aqueous flexo and gravure inks and overprint varnishes. The defoamer is characterized by a highly spontaneously defoaming effect and its outstanding stability on the press. It prevents foam building up in the ink ducts and/or pump system.

Recommended levels

0.2-1 % 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 is preferably used in the let-down, however it can be added at any time during production. As a result of its high activity the defoamer must be incorporated at moderate shear forces to ensure a good distribution. Otherwise defects may occur in the system.

Adhesives and sealants

Special features and benefits

BYK-094 is characterized by high efficiency and compatibility in defoaming all common aqueous adhesive systems such as polyurethane and acrylate dispersions. It combines excellent and spontaneous defoaming with long-lasting effect and high storage stability.

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Recommended levels

0.05-1 % 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 added at any time during production.

Coatings industry

Special features and benefits

BYK-094 is particularly recommended for pigmented and non-pigmented aqueous coatings. The defoamer prevents foam forming in the manufacture and application of the coatings and has an excellent long-term effect.

Recommended use

Architectural coatings	
Automotive refinish coatings	
General industrial coatings	
Wood and furniture coatings	0
especially recommended recommended	

Recommended levels

0.1–1 % 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 is preferably added to the millbase. After testing compatibility, it can be added at any time during production. The amount of defoamer used is often divided (by adding 2/3 into the millbase and 1/3 into the let-down or finished product).

Construction chemicals

Special features and benefits

BYK-094 is a very effective and compatible defoamer for hybrid systems that are based on mineral-bound drymix mortars in combination with an aqueous dispersion. The additive's special combination of active ingredients leads to a strong and long-lasting defoaming performance over the entire application window. By reducing the air void content, it improves the properties of fresh mortar as well as the physical properties of the hardened system. BYK-094 is particularly suitable for 2-pack waterproofing membranes.

Recommended levels

0.05–0.3 %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 added at any stage during production of the liquid component. Ensure that sufficient shear forces are applied.

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Oil and gas industry

Special features and benefits

BYK-094 is recommended for mitigation and prevention of foam in water-based drilling fluids. It is compatible with many water-based and clear brine fluids and has no significant effect on fluid rheology or mud density.

Recommended levels

0.2 lb/bbl of 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

BYK-094 may be added to the fluid prior to mixing as an anti-foam, or may be added after mixing as needed to destroy foam that has already formed.





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