

BYK-1642

Polymer-based, VOC- and silicone-free defoamer for aqueous coatings, printing inks, adhesives, paper coatings, and construction chemicals. Optimum performance at the lowest dosage.

Product data

Composition

Defoamer formulation made of polyamide particles and highly branched polymers

VOC-free (< 1500 ppm)
Contains no alkylphenol
ethoxylates.

Typical properties

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

Density (20 °C): 1.00 g/ml
Non-volatile matter (60 min., 105 °C): 62 %
Carrier: Water

Storage and transportation

To be stored and transported between 0 °C and 50 °C. Temperature-sensitive emulsion. If the storage temperature drops below or exceeds the recommended temperature, the product should be checked and, if necessary, re-emulsified at room temperature.

Special note

BYK-1642 is a food contact-compliant variant of BYK-1640, and can be used in indirect contact with food under certain conditions. Detailed information can be found in the food contact document for BYK-1642.

Applications

Coatings industry

Special features and benefits

BYK-1642 is a very versatile defoamer for aqueous systems. The additive is especially recommended for use in the production and application of emulsion paints and plasters within a PVC range of 30-85. The additive is free of silicones and mineral oil, and is especially suitable for VOC-free systems. BYK-1642 exhibits optimum performance at the lowest dosage, is stable to acids and alkalis, and can be used in the pH range 3-12. BYK-1642 can be used in aqueous systems in the can coatings field. It has a spontaneous defoaming effect and is also suitable for preventing microfoam. The additive shows very good compatibility, and can also be post-added. In coil coating systems, BYK-1642 can be used both in the millbase and be post-added.

Recommended use

Architectural coatings	<input checked="" type="checkbox"/>
Coil coatings	<input checked="" type="checkbox"/>
Can coatings	<input checked="" type="checkbox"/>
Marine & protective coatings	<input type="checkbox"/>

☒ 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. Optimal levels are determined through a series of laboratory tests.

Incorporation and processing instructions

The additive can be added at any time during production. Sufficiently high shear forces must be applied.

Adhesives & sealants**Special features and benefits**

BYK-1642 is a highly effective defoamer for all common dispersion adhesives, such as acrylic, polyurethane, and EVA dispersions. It inhibits foaming during both production and application. The product is free of silicones and mineral oil, and is especially recommended for VOC-free systems. It exhibits optimum performance at the lowest dosage, is stable to acids and alkalis, and can be used in the pH range 3-12.

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 added at any time during production. Sufficiently high shear forces must be applied.

Paper coatings**Special features and benefits**

BYK-1642 is a highly effective defoamer for all common paper coatings. It defoams and simultaneously inhibits the formation of foam, both during production of the coating as well as during its application using various application methods, such as film or size press, blade or curtain coating. The product is free of silicones and mineral oil, and exhibits optimum performance at the lowest dosage.

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 added at any time during production. However, the best effects will be achieved if the product is added to the paper coating early on.

Printing inks

Special features and benefits

BYK-1642 is particularly suitable for aqueous printing inks, overprint varnishes, and aqueous, radiation-curable printing systems.

Recommended levels

0.2-1 % 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

During incorporation, ensure sufficiently high shear forces are applied.

Construction chemicals

Special features and benefits

BYK-1642 is a highly effective defoamer for the production of common liquefiers based on lignin and naphthalene sulfonate. The additive is free of silicones and mineral oils, and is a non-labeled alternative to TiBP/TBP. BYK-1642 exhibits optimum performance at the lowest dosage.

Recommended levels

0.1-0.3 % 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 added at any time during production. Sufficiently high shear forces must be applied.



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This issue replaces all previous versions.