BYK-1799

VOC-free silicone-containing defoamer for solvent-borne, high-solid, and solvent-free systems. Particularly suitable for 100 % UV systems. Extremely high defoaming action. Especially recommended for matted and pigmented systems and printing inks.

Product Data

Composition
Blend of hydrophobic solids and foam-destroying polysiloxanes

Solvent-free
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):	0.99 g/ml
Non-volatile matter (10 min., 150 °C):	> 98 %

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
Mix well before use.

Applications

Liquid Coatings

Special Features and Benefits
BYK-1799 is a highly effective, emission-free silicone defoamer that is especially suitable for 100 % UV systems. The additive displays excellent spontaneous defoaming and is effective against both macro- and microfoam. Even at a low dosage, BYK-1799 has powerful defoaming properties, which makes it particularly recommended for matted or pigmented systems that have a certain tendency towards foam stabilization. Furthermore, the additive is characterized by being highly effective in high-solid and solvent-free systems based on epoxy, polyurethane and polyaspartic acid esters, as they are used in architectural or protective coatings.

Recommended Use

Architectural coatings	☐
Protective coatings	☐
Wood and furniture coatings	■
General industrial coatings	■

■ especially recommended ☐ recommended

Recommended Levels
0.05-0.5 % (in exceptional cases up to 0.8 %) 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
To achieve optimal defoaming, BYK-1799 should be added as early as the millbase stage. If incorporating at a later stage, sufficiently high shear forces must be applied to ensure the defoamer is well distributed and to prevent cratering.

Printing Inks

Special Features and Benefits
BYK-1799 is a highly effective defoamer that contains silicone and is particularly recommended for radiation-curing pigment concentrates and printing inks. The additive can also be used for overprint varnishes if sufficient shear force is introduced.

Recommended Levels
0.2-0.8 % 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
To ensure the full effect, the defoamer should be added as early as the grinding stage or at the start of the manufacturing process. If post-adding, sufficiently high shear forces must be applied to ensure the additive is well distributed and to prevent cratering.

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