

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 (68 °F): 8.26 lbs/US gal

Non-volatile matter (10 min., 302 °F): > 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	<input type="checkbox"/>
Protective coatings	<input type="checkbox"/>
Wood and furniture coatings	<input checked="" type="checkbox"/>
General industrial coatings	<input checked="" type="checkbox"/>

☒ 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.



BYK USA Inc.
524 South Cherry Street
P.O. Box 5670
Wallingford, CT 06492
USA
Tel 203 265-2086
Fax 203 284-9158

cs.usa@byk.com
www.byk.com

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