

BYK-3780

Silicone-containing surface additive for solvent-borne coating systems with a slight reduction in surface tension and slight increase in surface slip. Thermostable up to 250 °C. Good leveling with defoaming properties.

Product Data

Composition

Aralkyl-modified polymethylalkylsiloxane

SVHC label-free
(EU SDS)

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

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.

Special Note

BYK-3780 is a low-cycle version of BYK-323. The cyclic siloxane content D4 / D5 / D6 is in each case less than 0.1 %, therefore the SVHC label is not required in the safety data sheet.

Applications

Coatings Industry

Special Features and Benefits

The additive provides a slight reduction in the surface tension of coating systems. It is a silicone leveling additive that has a defoaming effect, does not stabilize or only slightly stabilizes the foam depending on the polarity of the coating system. BYK-3780 is thermostable up to 250 °C and does not negatively impact the intercoat adhesion. In matt coatings, it is used to orientate the matting agent and in high solid systems that are difficult to matt (polyurethane/acid-curing/unsaturated polyester) its use provides optimum matting agent orientation without shining up. In flow coatings, BYK-3780 stabilizes the flow curtain. In metallic coatings, it ensures consistent orientation of the aluminum pigments.

Recommended Use

The additive is particularly recommended for all solvent-borne coatings.

Recommended Levels

0.01-0.4 % 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 incorporated during any stage of the production process, including post-addition.

Special Note

Unlike so-called silicone oils, this additive is very user-friendly. However, before use, one should determine in a test series whether the foam is stabilized in certain systems. Similarly, the recoatability and cratering should be checked.



Additive Guide



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