

BYK-P 104 S

Controlled flocculating wetting and dispersing additive for solvent-borne, medium-polarity to high-polarity coatings to prevent the flooding/floating of titanium dioxide in combination with colored pigments. Contains silicone to improve flooding/floating behavior.

Product Data

Composition

Solution of a low molecular weight, unsaturated polycarboxylic acid polymer and a polysiloxane copolymer

Typical Properties

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

Acid value:	150 mg KOH/g
Density (68 °F):	7.89 lbs/US gal
Non-volatile matter (10 min., 302 °F):	50 %
Solvents:	Xylene/diisobutyl ketone 9/1
Flash point:	82 °F

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

Separation or turbidity may occur during storage and transportation. Mix well before use. Warm to 30-60 °C (86-140 °F) and mix well.

Special Note

White spirit-based coating systems or those that are diluted with white spirit have a limited compatibility. The additive is also available without the polysiloxane copolymer under the name BYK-P 104.

Applications

Coatings Industry

Special Features and Benefits

BYK-P 104 S provides a targeted, controlled flocculation of the pigments. Bridges are built between the individual pigment particles, thereby creating three-dimensional networks. This controlled flocculation of the pigments primarily prevents flooding and floating along with settling and sagging. BYK-P 104 S is particularly suited to medium-polarity to high-polarity coating systems to prevent the flooding and floating of titanium dioxide in combination with colored pigments. It has a limited compatibility with white spirit. In many cases, anticorrosive properties are improved when used in protective primers. BYK-P 104 S also contains a small quantity of a polysiloxane copolymer to improve flooding/floating behavior. This also prevents the formation of Bénard cells and improves the surface slip and leveling, and also the orientation of matting agents and aluminum pigments. In the majority of cases, it is no longer necessary to add the silicone additives which are usually required.

Recommended Levels

Amount of additive (as supplied) based upon pigment:

Inorganic pigments: 3-10 %
Titanium dioxides: 0.5-2.5 %
Organic pigments: 10-20 %

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

Incorporation and Processing Instructions

For optimum performance, the additive must be incorporated into the millbase before addition of pigments.



Additive Guide



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