DISPERBYK-2018

VOC- and solvent-free wetting and dispersing additive for aqueous paint systems, floor coatings, printing inks, inkjet inks, adhesives, and pigment concentrates.

Product data

Composition
Solution of a copolymer with pigment-affinic groups

VOC-free (< 1500 ppm)
Biocide-free

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

Density (20 °C):	1.11 g/ml
Active substance:	52% in water
Amine value:	26 mg KOH/g
Delivery form:	clear to slightly turbid liquid

Storage and transportation
Separation or turbidity may occur during storage or transportation at temperatures below 0 °C. Warm to 20 °C and mix well.

Applications

Coatings industry

Special features and benefits
DISPERBYK-2018 deflocculates pigments by means of electrosteric stabilization. The additive is particularly suitable for the production of binder- and VOC-free pigment concentrates for aqueous coatings. DISPERBYK-2018 has been specially developed for inorganic pigments and transparent iron oxides, and can partly also be used for organic pigments. As a result of the small particle size of the deflocculated pigments, high levels of transparency can be achieved. Furthermore, the viscosity is greatly reduced, which enables a higher pigment content to be achieved. DISPERBYK-2018 can also be used in alkaline systems.

Recommended use

Industrial coatings	☐
Wood and furniture coatings	■
Marine coatings	■
Protective coatings	■
Automotive coatings	☐
Architectural coatings	■
Floor coatings	■

■ especially recommended ☐ recommended

Recommended levels
Additive (as supplied) based on the pigment:

Transparent iron oxides:	20–60 %
Inorganic pigments:	5–40 %
Titanium dioxide:	6–8 %
Organic pigments:	30–90 %
Carbon black:	100–150 %

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions
For optimum performance, the additive should be added to the millbase before the incorporation of the pigments.

Printing Inks and Inkjet Inks

Special features and benefits
DISPERBYK-2018 deflocculates pigments by means of electrosteric stabilization. The additive is particularly suitable for the production of binder- and VOC-free pigment concentrates and slurries for aqueous printing inks and inkjet inks. DISPERBYK-2018 has been specially developed for the stabilization of inorganic pigments such as titanium dioxide, transparent iron oxides, and ceramic pigments. The highly deflocculating effect of DISPERBYK-2018 ensures high color strength and gloss, low haze values, and a low millbase viscosity. Pigment concentrates manufactured using DISPERBYK-2018 are very storage-stable.

Recommended use

Aqueous printing inks and pigment concentrates	☐
Aqueous inkjet inks	■

■ especially recommended ☐ recommended

Recommended levels
Additive (as supplied)
in %

	Printing inks	**Inkjet inks**
Titanium dioxide	1–5	5–20
Transparent iron oxides		20–60
Other inorganic particles		10–100 (depending on the size and chemical nature of the particle)

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions
For optimum performance, the additive should be added to the millbase before the incorporation of the pigments.

Adhesives and sealants

Special features and benefits
DISPBERBYK-2018 deflocculates fillers and pigments by means of electrosteric stabilization. The additive significantly reduces viscosity of the aqueous adhesive system, enabling easier processability or higher filler loading. Aqueous adhesive formulations that contain DISPERBYK-2018 exhibit low foam formation.

Recommended levels
0.5–1.5 % additive (as supplied) based on pigment for fillers.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions
For optimum performance, the additive should be added to the system before the incorporation of the fillers.

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