

Data Sheet Issue 10/2012

DISPERBYK-190

VOC and solvent-free wetting and dispersing additive for aqueous coating systems, printing inks and adhesives. Standard additive for binder-free pigment concentrates. Suitable for all pigments.

Product Data

Composition

Solution of a high molecular weight block copolymer with pigment affinic groups

VOC-free (< 1500 ppm)

Typical Properties

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

Acid value: 10 mg KOH/g Density (68 °F): 8.85 lbs/US gal

Non-volatile matter (10 min., 302 °F): 40 % Solvents: Water

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 or transportation below 0 °C (32 °F). Heat to 20 °C (68 °F) and stir.

Applications

Printing Inks

Special Features and Benefits

The additive deflocculates pigments by means of steric stabilization. As a result of the small particle sizes of the deflocculated pigments, high levels of gloss can be achieved and the color strength is improved. The transparency is also increased and the viscosity is reduced. In this way, the flow characteristics are also improved and higher pigment loading is possible.

Recommended Use

The additive is especially suitable for producing binder-free, stable pigment concentrates with a pigment content of 30-60%. These pigment concentrates can be let down with standard aqueous binders, for example acrylate dispersions or water-soluble acrylic resins.

Recommended Levels

Amount of additive (as supplied) based upon pigment:

Titanium dioxides: 10-12 % Organic pigments, Carbon blacks: 15-50 %

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

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Incorporation and Processing Instructions

Grinding should only take place in water (without binders, amines or co-solvents). Mix the additive with water and only add the pigments once the additive has been homogeneously and uniformly distributed.

Coatings Industry

Special Features and Benefits

The additive deflocculates pigments by means of steric stabilization. As a result of the small particle sizes of the deflocculated pigments, high levels of gloss can be achieved and the color strength is improved. Transparency and hiding power are also increased and viscosity is reduced. In this way, the flow characteristics are also improved and higher pigment loading is possible.

Recommended Use

Architectural coatings	
Wood and furniture coatings	
Automotive coatings	
Can coatings	
Protective coatings	
Leather finishes	

especially recommended

The additive is recommended for producing binder-free, stable pigment concentrates for aqueous coatings without flooding/floating.

Recommended Levels

Amount of additive (as supplied) based upon pigment:

Inorganic pigments: 20-30 %
Titanium dioxides: 10-12 %
Organic pigments: 30-75 %
Carbon blacks: 130-150 %

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

Incorporation and Processing Instructions

Grinding should only take place in water (without binders, amines or co-solvents). Mix the additive with water and only add the pigments once the additive has been homogeneously and uniformly distributed.

Adhesives

Special Features and Benefits

The additive improves the dispersion quality of fillers and pigments. By means of steric stabilization it deflocculates the pigments and fillers and reduces viscosity. In this way, the flow characteristics are also improved and higher pigment loading is possible.

Recommended Use

Aqueous adhesives	
Epoxy systems	
PUR systems	
especially recommended recommended	

The additive is particularly recommended if the fillers and pigments are to be dispersed directly in water without binders.

Recommended Levels

Amount of additive (as supplied) based upon pigment:

Inorganic pigments: 20-30 %
Titanium dioxides: 10-12 %
Organic pigments: 30-75 %
Carbon blacks: 130-150 %
Fillers: 1-3 %

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

Incorporation and Processing Instructions

Dispersion should only take place in water (without binders, amines or co-solvents). Mix the additive with water and only add the fillers and pigments once the additive has been homogeneously and uniformly distributed.

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