

# 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 (20 °C): 1.06 g/ml  
Non-volatile matter (10 min., 150 °C): 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](http://www.byk.com) for further information.

### Storage and Transportation

Separation or turbidity may occur during storage or transportation below 0 °C. Heat to 20 °C 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.

**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	<input checked="" type="checkbox"/>
Epoxy systems	<input type="checkbox"/>
PUR systems	<input type="checkbox"/>

☒ 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.

## DISPERBYK-190

Data Sheet  
Issue 10/2012

**BYK-Chemie GmbH**  
P.O. Box 10 02 45  
46462 Wesel  
Germany  
Tel +49 281 670-0  
Fax +49 281 65735

**info@byk.com**  
**www.byk.com/additives**

ANTI-TERRA®, BYK®, BYK®-DYNWET®, BYK®-SILCLEAN®, BYKANOL®, BYKETOL®, BYKJET®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, DISPERBYK®, DISPERPLAST®, LACTIMON®, NANOBYK®, PAPERBYK®, SILBYK®, VISCOBYK®, and Greenability® are registered trademarks of BYK-Chemie. AQUACER®, AQUAMAT®, AQUATIX®, CERACOL®, CERAFAK®, CERAFLLOUR®, CERAMAT®, CERATIX®, HORDAMER®, and MINERPOL® are registered trademarks of BYK-Cera.

SCONA® is a registered trademark of BYK Kometra.

This information is given to the best of our knowledge. Because of the multitude of formulations, production, and application conditions, all the above-mentioned statements have to be adjusted to the circumstances of the processor. No liabilities, including those for patent rights, can be derived from this fact for individual cases.

This issue replaces all previous versions – Printed in Germany