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# **DISPERBYK-199 BF**

VOC-free wetting and dispersing additive for stabilizing organic and inorganic pigments in aqueous coatings, adhesives, pigment concentrates and care products. Biocide-free version of DISPERBYK-199.

### **Product Data**

### Composition

Solution of a copolymer with pigment-affinic groups

## **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 Non-volatile matter (20 min., 150 °C): 40 % Solvents: Water

### **Storage and Transportation**

Separation or turbidity may occur at temperatures below 0  $^{\circ}$ C. Warm to 20  $^{\circ}$ C and mix well.

VOC-free (< 1500 ppm) Biocide-free APEO-free

## **Applications**

## **Coatings Industry**

### **Special Features and Benefits**

DISPERBYK-199 BF uses electrosteric stabilization to deflocculate the pigments. As a result of the small particle size 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. The additive represents an alternative to the polyelectrolyte-based and high molecular weight wetting and dispersing additives that are usually used in aqueous systems and is suitable for both inorganic and organic pigments.

### **Recommended Use**

DISPERBYK-199 BF is recommended for aqueous coatings (PVK 16-35 %) and highly filled pigment concentrates.

| Architectural coatings                   |  |
|--|--|
| Coil coatings                            |  |
| Marine and corrosion protection coatings |  |
| General industrial coatings              |  |
| Wood and furniture coatings              |  |
| Leather coatings                         |  |
|  |  |

especially recommended recommended

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### **Recommended Levels**

Amount of additive (as supplied) based upon pigment:

Inorganic pigments: 10-30 % Titanium dioxide: 2.5-7.5 % Organic pigments: 37-100 % Carbon black: 75-125 %

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 should be added to the millbase before the incorporation of the pigments.

### **Adhesives & Sealants**

### **Special Features and Benefits**

DISPERBYK-199 BF deflocculates fillers and pigments through electrosteric stabilization. In filled adhesive systems, the viscosity is considerably reduced, enabling easier processing or a higher filler loading. It represents an alternative to the polyelectrolyte-based and high molecular weight wetting and dispersing additives that are usually used in aqueous systems and is particularly suitable for inorganic fillers and pigments. DISPERBYK-199 BF is recommended for all aqueous emulsion adhesives and sealants.

Amount of additive (as supplied) based on pigment or filler:

Inorganic pigments: 2-10 % Titanium dioxide: 1.5-2 % Fillers: 0.5-1 %

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 should be added to the system before the incorporation of the fillers and pigments.

## **Care products**

### **Special Features and Benefits**

DISPERBYK-199 BF improves the dispersion quality of abrasives and other insoluble solid substances. It ensures deflocculation of the insoluble solids through steric stabilization, and has a positive influence on rheological behavior. This makes it possible to achieve a higher solid content.

### **Recommended Use**

The additive is particularly recommended if the solids are to be dispersed directly in the aqueous medium.

### **Recommended Levels**

Amount of additive (as supplied) based upon pigment:

Inorganic pigments: 10-30 % Titanium dioxide: 2.5-7.5 % Organic pigments: 37-100 % Carbon black: 75-125 %

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 should be added slowly to the shear-stable formulation whilst stirring. The solids should only be added once the additive has been homogeneously and uniformly distributed.

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