

# DISPERBYK-168 A

Wetting and dispersing additive for solvent-borne and solvent-free radiation-curable coatings, printing inks, and adhesives.

## Product data

### Composition

Solution of modified polyurethane

Aromatic-free  
Tin-free

### Typical properties

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

Density (20 °C):	1.12 g/cm <sup>3</sup>
Non-volatile matter (20 min, 150 °C):	30 %
Solvent:	dicarboxylic acid ester
Flash point:	91 °C
Amine value:	10.5 mg KOH/g
Delivery form:	liquid

### Storage and transportation

Product shelf life in unopened original packaging: 36 months

Stir before use. Separation or turbidity may occur at temperatures below 5 °C. In this case, warm to 30-40 °C and stir.

### Special note

DISPERBYK-168 A is the tin-free version of DISPERBYK-168.

The treatment of some organic pigments can negatively influence the effectiveness of the additive. In these cases, the use of an untreated pigment of the same type is recommended.

## Applications

### Coatings industry

#### Special features and benefits

Very effective and permanent deflocculation and stabilization of pigments through steric hindrance for:

- Higher gloss, improved color strength, transparency, or hiding power, respectively
- Significant reduction of mill base viscosity
- Flood- and float-free colors in pigment mixtures

#### Recommended use

The additive is recommended for radiation-curable general industrial coatings, wood and furniture coatings, can coatings, and coil coatings.

**Recommended levels**

Amount of additive (as supplied) based on the pigment:

Inorganic pigments:	10-15 %
Titanium dioxide:	5-6 %
Organic pigments:	30-90 %
Carbon black:	70-140 %

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 must be incorporated into the millbase before addition of pigments. The resin and solvent components of the millbase are pre-mixed and then the additive is slowly incorporated while stirring continuously. Do not add the pigments until the additive has been fully distributed.

**Printing inks****Special features and benefits**

Very effective and permanent deflocculation and stabilization of pigments through steric hindrance for:

- Higher gloss, improved color strength, transparency, or hiding power, respectively
- Significant reduction of mill base viscosity
- Reduced dispersion time
- Flood- and float-free colors in pigment mixtures

**Recommended use**

The additive is recommended for UV-curing flexo and offset printing inks.

**Recommended levels**

Amount of additive (as supplied) based on the pigment:

Titanium dioxide:	2.5-5 %
Organic pigments:	10-20 %
Carbon black:	10-20 %

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 must be incorporated into the millbase before addition of pigments. The resin and solvent components of the millbase are pre-mixed and then the additive is slowly incorporated while stirring continuously. Do not add the pigments until the additive has been fully distributed.

**Adhesives and sealants****Special features and benefits**

Very effective and permanent deflocculation and stabilization of pigments through steric hindrance for:

- Significant reduction of viscosity
- Higher transparency
- Reduced dispersion time

**Recommended use**

The additive is recommended to stabilize titanium dioxide, organic pigments and carbon blacks in radiation-curable adhesive systems.

**Recommended levels**

Amount of additive (as supplied) based on the pigment:

Titanium dioxide: 2.5-5 %  
Organic pigments: 10-20 %  
Carbon black: 10-20 %

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 must be incorporated into the millbase before addition of pigments. The resin and solvent components of the millbase are pre-mixed and then the additive is slowly incorporated while stirring continuously. Do not add the pigments until the additive has been fully distributed.



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