DISPERBYK-168

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

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

Amine value:	10.5 mg KOH/g
Density (20 °C):	1.10 g/ml
Non-volatile matter (20 min., 150 °C):	30 %
Solvents:	Dicarboxylic acid ester
Flash point:	100 °C

Storage and Transportation
Mix well before use. Separation or turbidity may occur at temperatures below 5 °C. Warm to 20 °C and mix well.

Special Note
The treatment of some organic pigments can negatively influence the effectiveness of the additive. In these cases, tests with the untreated pigment of the same type may be successful.

Applications

Coatings Industry

Special Features and Benefits
The additive deflocculates the pigments and stabilizes them by means of steric hindrance. It provides equal electrical charge to the pigment particles. The resulting repulsion and the steric stabilization prevent a possible co-flocculation, which leads to flood and float-free color in pigment mixtures. The deflocculating properties of the additive increase gloss, color strengh, transparency, and hiding power and reduce the viscosity of the millbase.

Recommended Use
The additive is recommended for radiation-curable industrial coatings, can coatings and coil coatings.

Recommended Levels
Amount of additive (as supplied) based upon pigment:

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

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 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
The additive deflocculates the pigments and stabilizes them by means of steric hindrance. It provides equal electrical charge to the pigment particles. The resulting repulsion and the steric stabilization prevent a possible co-flocculation, which leads to flood and float-free color in pigment mixtures. The deflocculating properties of the additive increase gloss, color strengh, transparency, and hiding power and reduce the viscosity of the millbase.

Recommended Use
The additive is particularly recommended for UV-curable flexo and offset printing inks. It increases gloss and transparency. DISPERBYK-168 reduces the dispersion time, lowers viscosity and increases color strength.

Recommended Levels
Amount of additive (as supplied) based upon pigment:

Titanium dioxides:	2.5-5 %
Organic pigments, Carbon blacks:	10-20 %

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 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

Special Features and Benefits
The additive deflocculates the pigments and stabilizes them by means of steric hindrance, which leads to a reduction in viscosity and higher transparency. DISPERBYK-168 reduces the dispersion time.

Recommended Use
DISPERBYK-168 is recommended for stabilizing titanium dioxide, organic pigments and carbon blacks in radiation-curable adhesive systems.

Recommended Levels
Amount of additive (as supplied) based upon pigment:

Titanium dioxides:	2.5-5 %
Organic pigments, Carbon blacks:	10-20 %

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 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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This issue replaces all previous versions.