

Data Sheet Issue 04/2013

# **DISPERBYK-142**

High molecular weight wetting and dispersing additive for solvent-borne coatings and pigment concentrates. Particularly suitable for stabilizing pigments in epoxy resins.

### **Product Data**

#### Composition

Solution of a phosphoric ester salt of a high molecular weight copolymer with pigment-affinic groups

### **Typical Properties**

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

Amine value: 43 mg KOH/g Acid value: 46 mg KOH/g Density (68 °F): 8.59 lbs/US gal

Non-volatile matter (20 min., 302 °F): 60 %

Solvents: Methoxypropylacetate

Flash point: 118 °F

# **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 Transport**

DISPERBYK-142 may adversely affect the coating adhesion to steel substrates in baking enamel systems. Before using in white baking enamel systems, check whether DISPERBYK-142 causes yellowing. In this case DISPERBYK-180 is recommended to stabilize titanium dioxide.

## **Applications**

#### **Coatings Industry**

#### **Special Features and Benefits**

The additive deflocculates pigments by 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. In addition, the additive increases transparency with transparent pigments and hiding power with opaque pigments. Viscosity is reduced. In this way, the leveling properties are also improved and higher pigment loading is possible.

#### **Recommended Use**

DISPERBYK-142 is highly compatible with all standard coating binders. It is particularly recommended for use with epoxy resins.

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# **Recommended Levels**

Amount of additive (as supplied) based upon pigment:

Inorganic pigments: 12-17 % Organic pigments: 25-70 % Carbon blacks: 45-90%

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.

#### **Printing Inks**

#### **Special Features and Benefits**

The additive deflocculates pigments by 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. In addition, the additive increases transparency with transparent pigments and hiding power with opaque pigments. Viscosity is reduced. In this way the flow properties are also improved and higher pigment loading is possible.

#### **Recommended Use**

DISPERBYK-142 is recommended for all solvent-borne printing inks.

#### **Recommended Levels**

Amount of additive (as supplied) based upon pigment:

Inorganic pigments: 5-10 % Organic pigments: 15-25 % 15-25% Carbon blacks:

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.