

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 (20 °C):	1.03 g/ml
Non-volatile matter (20 min., 150 °C):	60 %
Solvents:	Methoxypropylacetate
Flash point:	48 °C

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.

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 mill base before addition of pigments.

Printing Inks

Special Features and Benefits

The additive defloculates pigments by steric stabilization. As a result of the small particle sizes of the defloculated 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 %
Carbon blacks: 15-25 %

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 mill base before the addition of pigments.