Data Sheet Issue 08/2021

DISPERBYK-166

High molecular weight wetting and dispersing additive for organic pigments in solvent-borne coatings.

Product Data

Composition

Solution of modified polyurethane

Typical Properties

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

Amine value: 20 mg KOH/g Density (20 °C): 0.97 g/ml Non-volatile matter (20 min., 150 °C): 29.5 %

Solvents: Butylacetate/methoxypropylacetate 4/1

Flash point: 24 °C

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

DISPERBYK-166 deflocculates pigments and stabilizes them by means of steric hindrance. It prevents a possible coflocculation, which leads to non-floating coloring in pigment blends. The deflocculating property of the additive results in increased gloss, color strength, transparency or hiding power, and a reduced millbase viscosity.

Recommended Use

The additive is particularly recommended for automotive coatings and should be used for hard-to-disperse pigments (such as DPP types).

Recommended Levels

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

Titanium dioxides: 5-6 % Organic pigments: 50-80 %

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

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Incorporation and Processing Instructions

Wetting and dispersing additives should generally be added to the millbase. Only in this way can they be fully effective.

Pre-mix the resin and solvent components of the millbase and then gradually let the additive flow in whilst stirring. Add the pigments only after the additive has been thoroughly distributed. In baking coatings, BYK-331 should also be used to improve leveling and to prevent Bénard cells.







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This issue replaces all previous versions