DISPERBYK-2001

Wetting and dispersing additive for solvent-borne automotive coatings to stabilize pigments in base coats which contain CAB. Particularly strong reduction in millbase viscosity. Increases the jetness of carbon blacks in automotive coatings.

Product Data

Composition
Solution of a structured acrylate 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:	29 mg KOH/g	
Acid value:	19 mg KOH/g	
Density (68 °F):	8.57 lbs/US gal	
Non-volatile matter (20 min., 302 °F):	46 %	
Solvents:	Methoxypropylacetate/butylglycol/methoxypropanol	2/2/1
Flash point:	95 °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.

Applications

Coatings Industry

Special Features and Benefits
DISPERBYK-2001 deflocculates pigments by means of steric stabilization. It also generates a uniform electrical charge in the pigment particles. The resulting repulsion effect and the steric stabilization prevent any coflocculation which leads to non-floating coloring in pigment blends. As a result of the small particle size of the deflocculated pigments, high levels of gloss can be achieved and the color strength is improved, transparency is increased in transparent pigments and hiding power is increased in opaque pigments. In the case of fine-particle carbon blacks, DISPERBYK-2001 produces a significant improvement in the jetness of carbon blacks. Moreover, the viscosity is reduced which improves the leveling properties and enables a higher pigment load. In many systems, the use of DISPERBYK-2001 produces an even greater reduction in the viscosity of the millbase than DISPERBYK-2000.

Recommended Use
DISPERBYK-2001 is particularly recommended for automotive coatings and is suitable for base coats containing CAB and all top coats. It prevents the reflocculation of the pigments even when CAB is added after grinding. For an outstanding grind result it is not necessary to use CAB in the grinding phase.

Recommended Levels

Amount of additive (as supplied) based upon pigment:

Inorganic pigments:	10-15 %
Titanium dioxides:	5 %
Organic pigments:	15-60 %
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. Pre-mix the resin and solvent components of the millbase and then gradually let the additive flow in whilst stirring. Only add the pigments when the additive has been thoroughly distributed. In less polar binder solutions, adding DISPERBYK-2001 produces a brief increase in viscosity. This is product-specific and has no influence on the final dispersing result. The brief increase in viscosity can be prevented by adding small quantities of polar solvent (such as an alcohol or glycol) either to the additive or to the millbase.

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