BYK-3565

Surface-active additive to improve leveling and increase the surface energy of aqueous, solvent-borne, UV and 100% systems with anti-cratering properties, especially in aqueous systems.

Product data

Composition
Polyether- and silicone-macromer-modified polyacrylate

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

Density (20 °C):	1.06 g/cm³
Active substance:	100 %
Flash point:	88 °C
Color:	Colorless- light yellow, clear-slight cloudy
Delivery form:	viscous liquid

Storage and transportation
Product shelf life in unopened original packaging: 36 months
To be stored and transported at a temperature below 50 °C.

Applications

Coatings industry

Special features and benefits
Firstly, BYK-3565 is a leveling additive that combines good leveling with anti-cratering properties, especially in aqueous systems. Secondly, given suitable compatibility, it can increase the surface energy of the cured coating film in all systems, which positively effects the wetting and leveling of the next coating layer as well as intercoat adhesion.

Recommended use

Automotive OEM coatings	■
Automotive refinish coatings	■
General industrial coatings	■
Architectural coatings	■
Floor coatings	■
Marine and protective coatings	□

■ especially recommended □ recommended

Recommended levels
0.1-2 % additive (as supplied) based on the total formulation, depending on the application.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions
The additive can be added at any stage of the coating manufacture as long as homogeneous incorporation is ensured.

Special note
As a result of slight incompatibility or by means of suitable dosage, BYK-3565 must be present at a sufficient concentration at the coating/air interface in order to increase the surface energy of the cured coating film. The polyether modifications are conditionally temperature stable and can break down at higher baking temperatures (e.g. >10 min at 170 °C), which can affect the surface energy and recoatability. BYK-3565 is not reactive. The long-term effect on the surface energy is highly dependent on the system used.

Construction chemicals

Special features and benefits
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Incorporation and processing instructions
The additive can be added at any stage of the coating manufacture as long as homogeneous incorporation is ensured.

Special note
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Printing inks

Special features and benefits
BYK-3565 can be used in aqueous, solvent-borne, and UV-curable systems. The additive increases the surface energy of dried or cured inks and printing primers overall, especially the polarity. This leads to improved overprinting behavior and leveling of subsequent layers, such as additional printing inks and overprint varnishes. It can also have a positive effect on the adhesion of the overprinted layers. BYK-3565 has no impact on the surface tension of the liquid ink and maintains the transparency of overprint varnishes when added to them.

Recommended use

Printing inks	■
Printing primer, pre-print varnishes	■
Overprint varnishes	□

■ especially recommended □ recommended

Recommended levels

0.1-2.0 % additive (as supplied) based on the total formulation.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions

The additive can be incorporated during any stage of the production process, including post-addition.

Special note

BYK-3565 must be sufficiently incompatible in the system so as to be able to orientate toward the coating-air interface. The additive does not cross-link with the binder system. Its long-term effect is therefore very system-dependent.

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