

BYK-3942 P

Adhesion promoter and substrate wetting additive for powder coatings with substrate-affinic adhesive groups for critical substrates.

Product Data

Composition

High molecular weight copolymer with basic adhesive groups, adsorbed on silicon dioxide

Typical Properties

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

Active substance:	63 %
Density (20 °C):	1.35 g/ml
Residue after calcining:	34 %
Supplied as:	fine white powder

Applications

Powder Coatings

Special Features and Benefits

BYK-3942 P improves the adhesion of the powder coating to metallic substrates that have undergone a variety of pre-treatments. It also improves substrate wetting in the case of insufficient pre-treatment or non-residue-free pre-cleaning. It is likewise recommended for use in powder coatings for non-metallic substrates. The improved adhesion produces better results in the natural salt spray test (NSS) and other standard testing procedures that are used to test the adhesion of powder coatings. In particular, BYK-3942 P also improves adhesion after immersion in water.

Recommended Use

BYK-3942 P is recommended for all powder coating systems based on epoxy, polyester, and polyurethane resin, as well as for polyester/epoxy resin combinations. The adhesion promoter should always be used in combination with a standard leveling additive such as BYK-368 P or BYK-3900 P.

Recommended Levels

0.5-3 % additive (as supplied) based on the total formulation.

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

Incorporation and Processing Instructions

The product is mixed with resin, hardener, pigments, and other raw materials in a high-speed mixer and then extruded. Good dispersion of the additive via extrusion is necessary to avoid surface defects and achieve optimum effectiveness.

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This issue replaces all previous versions.