# BYK-4509

Adhesion promoter for solvent-borne and aqueous systems applied to metallic substrates.

## Product Data

**Composition**
Solution of polyester alkyl ammonium salt

**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: | 29 mg KOH/g |
| Density (20 °C): | 1.11 g/ml |
| Non-volatile matter (10 min., 150 °C): | 80 % |
| Solvents: | Methoxypropanol |
| Flash point: | 45 °C |

## Applications

### Coatings Industry

**Special Features and Benefits**
The neutralized, acidic groups of the silicone-free adhesion promoter create a strong affinity, in particular to metallic substrates, and improve adhesion to steel, galvanized steel, aluminum and also to glass. BYK-4509 reacts with melamine resins and polyisocyanates and is bound into the polymer matrix through this. It is compatible with most binders and is therefore ideal for universal use. It can be utilized in aqueous and solvent-borne coatings. BYK-4509 is recommended first and foremost for use in baking systems and 2 K systems. In solvent-borne, acid-catalyzed systems, it has no influence on cross-linking. In aqueous systems, BYK-4509 shows very good pH stability.

**Recommended Use**

| | |
|---|---|
| Can Coatings | ■ |
| Coil Coatings | ■ |
| Industrial Coatings | ■ |
| Protective Coatings | □ |

■ particularly recommended □ recommended

## Recommended Levels

1-4 % additive (as supplied) based upon total formulation.

The above recommended levels can be used for orientation. Optimal dosage levels are determined through a series of tests. As a reference point, a dosage of 1.3 % additive as supplied on the total formulation can be started with.

## Incorporation and Processing Instructions

The additive can be incorporated at any time during paint production with average shear forces.
For multi-layer systems, BYK-4509 should be used in the layer that is directly applied onto the substrate.

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This issue replaces all previous versions.