

This product was previously marketed as **ADDITOL® XL 186**. All specifications, formulations, and performance characteristics remain unchanged.

TYPE

Phosphoric acid ester

FORM OF DELIVERY (f.o.d.)

Active substance

approx. 90 %

PRODUCT DATA

Determined per batch:

Dynamic Viscosity DIN EN ISO 3219

dynamic viscosity (25 1/s; 23 °C)	[mPa.s]	5000 - 14000
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Acid Value DIN EN ISO 2114

acid value (form of delivery)	[mg KOH/g]	530 - 670
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Not continually determined:

Colour / Appearance VLN 250

colour		brown
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Density (Liquids) DIN EN ISO 2811-2

density approx. (20 °C)	[g/cm³]	1,28
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Flash Point (Pensky-Martens) DIN EN ISO 2719

flash point	[°C]	> 100
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SPECIAL PROPERTIES

ADDITOL® XL 186 BOND additive improves the adhesion of stoving enamels and fast drying air drying paints on sheet iron, and in particular, the intercoat adhesion of multi-coat paint systems.

DILUTABILITY

ADDITOL® XL 186 BOND additive can be diluted with ethers and ketones as e. g. diglycol dimethyl ether or methyl ethyl ketone. Stable solutions are obtained as long as the Additol content remains below 30 %. It is very soluble in alcohols, however the solutions are not chemically stable (alcoholysis) and must therefore be used immediately after preparation.

SUGGESTED USES

ADDITOL® XL 186 BOND is a specific, high efficiency additive which improves the intercoat adhesion of top coats or surfacers to primers. It is compatible with coatings, so that, as long as the recommended amounts of addition are followed, it does not give rise to surface defects or the reduction of film properties.

The improvement of adhesion has a favourable influence on the mechanical properties of the coating and improves the anticorrosion properties; weather resistance and storage stability are unchanged.

In the case of formulations containing acid-sensitive organic pigments, it may lead to colour changes: in such cases it is necessary to check the compatibility in preliminary tests.

ADDITOL® XL 186 BOND may be combined with anionic and nonionic surfactants. However, in the case of cationic products, the compatibility must be checked in preliminary tests, since the danger of mutual coprecipitation exists and the gloss of the coating may be reduced. An improvement in the adhesion direct to metal of stoving enamels and very rapid air drying paints on sheet iron can be observed in many cases.

In oxidatively drying coatings, the choice of too high dosage may inhibit the drying properties. After dilution with a suitable waterthinnable organic solvent, ADDITOL® XL 186 BOND can also be used in anionically stabilized waterborne paints, the pH value of the paint system must be adjusted.

PROCESSING

ADDITOL® XL 186 BOND additive can be added in any stage of the coating manufacture. Most favourable is the addition in the let-down stage, prior to the adjustment with solvents, otherwise it can lower the viscosity.

Prior thinning of ADDITOL® XL 186 BOND with methyl ethyl ketone or diglycol dimethyl ether simplifies the dosage.

Additions of 0.3 - 1 % ADDITOL® XL 186 BOND on the total formulation are recommended.

STORAGE

At temperatures up to 25 °C storage stability packed in original containers amounts to at least 730 days.

ADDITOL® XL 186 BOND may crystallize but however becomes liquid again at 30 °C.

DISTINGUISHING FEATURES

ADDITOL® XL 186 BOND has a significantly higher acid value than ADDITOL® XL 180 BOND. Thus the intercoat adhesion of multi-coat paint systems is improved and the volatility reduced to a very low level.