

KOBOND™ 4045 Reactive Phosphate Ester Adhesion Promoter

DESCRIPTION

KOBOND™ 4045 is a 100% active, methacrylate-functional phosphate ester adhesion promoter designed to improve adhesion of organic resin systems to metals, ceramics, silicate materials and other inorganic substrates.

The methacrylate functionality enables KOBOND™ 4045 to participate in free-radical curing reactions in unsaturated resin and UV-curable systems. It can improve adhesion while contributing to enhanced mechanical properties, water resistance, damp-heat resistance and salt-spray resistance of the cured coating.

KOBOND™ 4045 is amino-free and exhibits a low tendency to yellow during storage.

BENEFITS / EFFECTS

- Improves adhesion to metal and inorganic substrates
- Promotes interfacial bonding to mineral fillers
- Participates in free-radical curing reactions
- Enhances water, damp-heat and salt-spray resistance
- Contributes to improved mechanical properties
- Amino-free with low yellowing tendency

PHYSICAL PROPERTIES

Appearance	Yellow liquid
Density at 25°C, g/cm ³	1.32
Viscosity at 25°C, mPa·s	2,000 - 6,000

These values are typical and are not intended for use as specifications.

APPLICATIONS

KOBOND™ 4045 is recommended as an adhesion promoter for unsaturated polyester resins, UV-curable coatings and other free-radical-curing systems. It is particularly effective in formulations requiring improved adhesion to metals, ceramics, silicate materials and other inorganic substrates. It can also improve interfacial bonding in systems containing mineral fillers such as silica, talc, mica, clay and wollastonite.

RECOMMENDED DOSAGE

The recommended addition level is 0.1-1.0 wt%, based on the total formulation. The optimum addition level should be determined through laboratory trials.

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PACKING

KOBOND™ 4045 is supplied in 25 kg pail.

HANDLING

This document does not contain the product safety information required for safe use. Before handling, please refer to the product and safety data sheets, as well as container labels, for information on safe usage, physical hazards, and health risks. Safety Data Sheet is available on the website, from the distributor, or by contacting SiSiB customer service.

STORAGE

Keep the container tightly closed and store in a cool, dry and well-ventilated place. KOBOND™ 4045 has a shelf life of 12 months from the date of manufacture in the original unopened packaging.

NOTE

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.

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We disclaim liability for any incidental or consequential damages.