

Binder for Waterborne Coatings

x-bond® E

x-bond® E binders are transparent or translucent aqueous inorganic-organic binders with a solid content between thirty and fifty per cent.

Basis of the x-bond® E binders is epoxy modified silicon oxide.

x-bond® E binders are suitable for the formulation of waterborne anti corrosion coatings, especially as clear coat or zinc lamella systems.

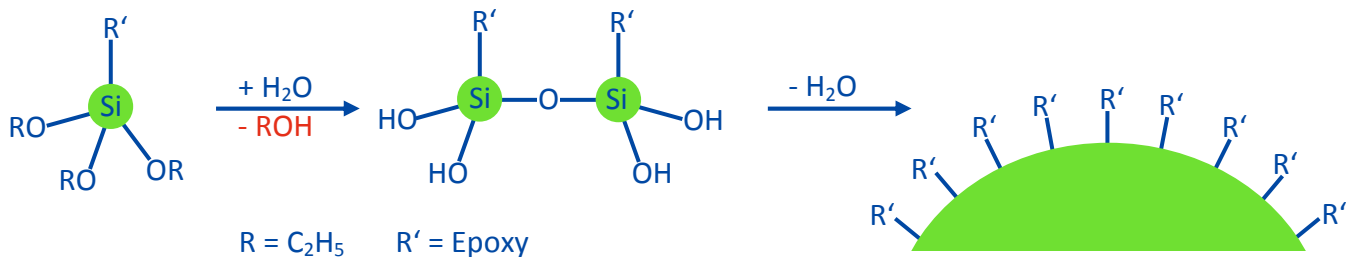
The binders can be cured preferably at 80°C to 130°C or at room temperature.

x-bond® E binders can also be used as additive in other coating systems.

Beside the described products x-bond® E 9011 and x-bond® E 9013 further binders of this type are available.



The Technology behind the Product: Epoxy modified Silicon Oxide



Single silanes are tied together. The result is an inorganic-organic binder, which can be cross-linked using the epoxy functionality R'.

Technical Information

Description:

x-bond® E binders are waterborne binders based on epoxy modified silicon oxide, which can be cured at low temperatures. Due to the pH neutrality with aluminium and zinc pigments low gassing, waterborne corrosion protection coatings for steel can be formulated. They can also be used as additive for example in waterborne epoxy based varnishes. **x-bond® E** binders are suitable to formulate spraying, dipping and brushing paints as well as coatings for coil applications.

Function:

Formulations based on **x-bond® E** binders enhance the abrasion resistance and protect from corrosion.

Processing:

The material can be used directly from the pail.

General Information:

Add if necessary pigments and fillers to **x-bond® E** binders. Adjust the solids content using water or other water-miscible solvents, such as butyl glycol. Improve the wetting if necessary with additives such as *BYK 346* or *BYK 348 (BYK Additives)*. The coatings can be cured after application depending on the use and on the used curing catalyst at room temperature or at temperatures up to 200°C, preferably at 130°C.

Appearance:

colourless, translucent liquid

Colourless to slightly yellowish liquid

Solids Content:

50 %

39 %

Amount Epoxy/kg:

1.15

0.9

Possible Usage:

varnishes with high water content

varnishes with lower solids content

Cleaning and Dilution:

Water and butyl glycol are suitable for the dilution of **x-bond® E** binders. Other solvents should be reviewed in advance.

Final remarks:

The present product information should only inform about the nature of product and possible applications. It's based on the current status of our knowledge and experience. Properties and the suitability of the product for a specific application are not legally guaranteed. The addressee is not released from its own testing. We reserve the right to make changes in course of technological progress. The mention of any trade name or trademarks from other manufacturers is made exemplary and doesn't exclude the use of other similar products. All data's above are reference values, which are subjected to updates in course of product maintenance. Further information to the product, such as technical data's or detailed processing parameters are described in relevant technical or material safety data

x-bond-E-BRO-DE-R1