



## Tin-free catalyst for solvent-borne two-component polyurethane coatings

### Description

**Borchi® Kat 0243** is a newly developed tin-free catalyst based on metal carboxylate that is used as an accelerator for solvent-borne two-component polyurethane coatings. **Borchi® Kat 0243** contains no organic complexing agents.

**Borchi® Kat 0243** is a non-hazardous replacement for other polyurethane catalysts, especially for tertiary amines and DBTL.

### Characteristic data

|                                      |   |                                   |
|--------------------------------------|---|-----------------------------------|
| Appearance:                          | colourless to yellow, medium viscous liquid   |                                   |
| Density (20 °C), g/cm <sup>3</sup> : | 0.98 – 1.02   | DIN 51757 (A) - 1994              |
| Non-volatile content, %:             | 59 – 69   | ISO 3251 – 1974 (2g, 3 h, 105 °C) |
| Viscosity (20 °C), mPa·s:            | max. 1,000  | ISO 3219 (A) - 1994               |
| Colour, Gardner:                     | max. 6  | ISO 4630 - 1981                   |
| Flash point, °C:                     | > 61  |                                   |
| Solvent:                             | white-spirit with <1 % aromatics  |                                   |
| Solubility:                          | soluble in standard organic coatings solvents,<br>e.g. white spirit, xylene, alcohols, glycols, acetone, esters |                                   |

### Properties

**Borchi® Kat 0243** accelerates the chemical reaction between the alcohol and isocyanate component of polyurethane coating systems, thus allowing optimum steering of the drying properties, both during force-drying and curing at room temperature.

The use of **Borchi® Kat 0243** ensures fast blocking stability of polyurethane coatings. Moreover improves solvent resistance, high film hardness and early sandability of the coating. **Borchi® Kat 0243** can be used as a replacement for dibutyl tin dilaurate (DBTL), in many systems yielding better properties, e.g. reduced yellowing and higher film hardness, than DBTL catalysed systems.

### Applications

**Borchi® Kat 0243** is for solvent-borne two-component polyurethane clear coats, e.g. for automotive refinishing. In pigmented coating systems, the catalytic activity may be reduced after prolonged storage. In such cases, we recommend the use of our product *Borchi® Kat 0245*.



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## Use and Dosage

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Our experience has shown the recommended addition rate of **Borchi® Kat 0243** to be between 0.02 and 0.06 % product, calculated on solid binder. The exact amount depends on the used binder and should be determined by means of preliminary trials.

**Borchi® Kat 0243** can be added as supplied or solved in any suitable solvent (e.g. 10 % in xylene) to the polyol component of the coating system. The solution has to be homogenized by stirring. **Borchi® Kat 0243** is also soluble in polar solvents and solvents of medium polarity. However, these solutions are only stable for a limited period of time.

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## Storage

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Protect from the effects of weathering and store at temperatures between 5 and 30 °C.  
Once opened, containers should be resealed immediately after each removal of the product.

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## Safety

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Please refer to our safety data sheet for information relating to product safety.

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