



## Highly reactive tin-free catalyst for one- and two-component polyurethane systems and RTV silicones

### Description

**Borchi® Kat 315** is a highly reactive tin-free catalyst based on bismuth neodecanoate used as accelerator for solventborne or solvent-free one- and two-component polyurethane systems and stoving enamels based on blocked isocyanates. Furthermore **Borchi® Kat 315** can be used in the catalysis of PU foams as well as RTV silicone resins. This catalyst contains no additional organic complexing agents.

**Borchi® Kat 315** is an ecologically safe replacement for other polyurethane catalysts, especially for amines and tin-based products like DBTL.

### Characteristic Data

Metal content	Bi: 15.80 - 16.20 %	MCI 64-69
Non-volatile content	Min. 70 %	ASTM D 1644 B
Viscosity	P - X	ASTM D 1545
Specific gravity	1.080 - 1.110 g/cm <sup>3</sup>	ASTM D 1963
Weight/Gallone	9.00 - 9.25 lb/gal	ASTM D 1963

### Properties

**Borchi® Kat 315** accelerates the chemical reaction between the polyol and isocyanate components of polyurethane systems, thus allowing optimal control of the curing properties, during both higher temperature and room temperature.

**Borchi® Kat 315** ensures fast blocking stability of polyurethane coatings and provides increased film hardness, earlier solvent resistance and allows earlier sanding of the applied coating.

This catalyst can be used as a replacement for tin-based products like dibutyl tin dilaurate (DBTL), in many cases yielding better coating properties than for systems catalyzed by DBTL. In particular, in many systems the use of **Borchi® Kat 315** results in increased film hardness at comparable drying time.

### Applications

**Borchi® Kat 315** is particularly suitable for solventborne and solvent-free pigmented one- and two-component polyurethane coatings, e.g. for automotive refinish coatings, general industrial coatings as well as coil coatings formulated with blocked isocyanates. In these systems, **Borchi® Kat 315** is characterized by very good activity.

**Borchi® Kat 315** can catalyze the condensation reaction in RTV silicone resins and can accelerate the cross linking of these polymers.



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## Dosage

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The recommended addition rate of **Borchi® Kat 315** in polyurethane coatings is according to our experience between 0.01 and 0.03% product, calculated on solid binder. The exact amount depends on the used binder and should be determined by means of preliminary trials.

The optimal addition rate of **Borchi® Kat 315** in PU foams and RTV silicone resins is depending on the reactive components and should as well be determined by means of preliminary trials.

**Borchi® Kat 315** can be added either in the supply form or diluted (e.g. in butyl acetate) to the polyol component of the coating System. **Borchi® Kat 315** should not be diluted below 10% of the supply form, since those 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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