

Catalyst for one- and two-component PU coatings and "one-shot" PU foams

Description

Borchi[®] Kat 28 is a stabilized tin octoate with a metal content of approx. 28 % by wt., soluble in most organic solvents. It is a clear solvent-free liquid of low viscosity.

Borchi[®] Kat 28 contains no additional organic complexing agents.

Characteristic data

Appearance:	clear, slight yellowish liquid	
Metal content Sn, %:	28.0 - 29.3	Borchers PV 100-42
Density (20 °C), g/cm ³ :	1.23 – 1.27	DIN 51757 (A) – 1994
Colour, Gardner:	≤ 5	DIN EN ISO 4630
Refractive index (20 °C):	approx. 1.496 (typical)	
Viscosity (25 °C), Pa.s:	approx. 0.3 (typical)	

Properties

Polyurethane coating systems

Borchi[®] Kat 28 is a catalyst used as curing accelerator for solvent borne one- and two-component polyurethane coatings and stoving enamels based on blocked isocyanates. It is a replacement for other polyurethane catalysts, especially for amines and tin-based products like DBTL.

Borchi[®] Kat 28 allows optimal control of the drying properties, both during forced-drying and curing at room temperature. **Borchi[®] Kat 28** ensures fast blocking stability of polyurethane coatings and provides increased film hardness, early solvent resistance and sanding capability. **Borchi[®] Kat 28** can be used as a replacement for dibutyl tin dilaurate (DBTL), in many cases yielding better properties than DBTL catalysed systems.

Borchi[®] Kat 28 is particularly suitable for solvent borne pigmented two-component polyurethane coatings, e.g. for automotive refinish coatings, industrial coatings and also coil coatings formulated with blocked isocyanates. In these systems, **Borchi[®] Kat 28** is characterized by its very good activity.

Polyurethane foam systems

Borchi[®] Kat 28 accelerates the reaction between the polyol and isocyanate component of polyurethane foam systems and therefore is an excellent catalyst for "one-shot" polyurethane foams.

Borchi[®] Kat 28 enables control of the foaming characteristics resulting in more homogeneous foam with improved resistance to heat and oxidational degradation.

Applications

Borchi[®] Kat 28 is suitable for

- one- and two-component solvent-borne polyurethane coating systems and heat-cured coatings based on blocked isocyanates
- one-shot polyurethane foam systems





Use and Dosage

For polyurethane coating systems, an addition rate of **Borchi[®] Kat 28** between 0.01 and 0.03 % product, calculated on solid binder is recommended, depending on the used binder and formulation. The exact amount has to be determined in preliminary trials. **Borchi[®] Kat 28** can be added to the polyol component of the coating system either in the supply form or diluted in a suitable solvent. Dissolved in organic solvents, **Borchi[®] Kat 28** is only stable for a limited period of time.

In polyurethane foam systems the recommended addition rate of **Borchi[®] Kat 28** is between 0.05 and 0.20 % by wt. calculated on the total formulation depending on the kind of application. It must be determined in preliminary trials.

Storage

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.

After opening the drums, a short-time consumption of **Borchi[®] Kat 28** is advisable. Although maximum stability is ensured by special product stabilization, the active tin content might be reduced if **Borchi[®] Kat 28** is exposed to air or stored unsealed or in drums with low filling level.

Safety

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

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