borchers™
A MILLIKEN BRAND

Performance Coating Additives

Catalysts for 1K & 2K Polyurethane Systems

Metal carboxylates for urethanes

Catalysts for polyurethane systems provide:

- Increased chemical reactivity
- Reduced cure times
- Improved chemical resistance of the final film
- Enhanced mechanical properties of the final film

Tin-Free Catalysts:

Product Name	System*	Chemistry	Metal Content (%)	Use (%)**	Reactivity	Description
Borchi® Kat 24	S	Bismuth 2-Ethylhexanoate	24	0.01-0.03	High	• Solvent-free; specially designed for one- and two-component polyurethane systems • Accelerates the chemical reaction between the alcohol and isocyanate component of polyurethane coatings systems, thus allowing optimum steering of the drying properties
Borchi® Kat 315	S	Bismuth Neodecanoate	16	0.01-0.03	High	• Solvent-free; specially designed for one- and two-component polyurethane systems and RTV silicones • Accelerates the chemical reaction between the polyol and isocyanate component of polyurethane foam systems
Borchi® Kat 0243	S	Bismuth/Lithium Neodecanoate	11.4	0.02-0.06	Medium	• Specially designed for two-component solventborne polyurethane clearcoats • Accelerates the chemical reaction between the alcohol and isocyanate component of polyurethane coatings systems, thus allowing optimum steering of the drying properties
2% Lithium Ten-Cem® WS	W/S	Lithium Neodecanoate	2	TBD in trial	Medium	• Drier and esterification catalyst in the synthesis of unsaturated polyester resins • Enables the resin manufacturer to produce resins of significantly lighter color while also allowing for better molecular weight control and improved product viscosities • Must be used in addition to surface driers like Cobalt, Manganese, or Borchi® OXY-Coat
22% Zinc Hex-Cem®	S	Zinc Octoate	22	0.03-0.50	Medium	• Catalyst for solventborne one- and two-component polyurethane clearcoats and pigmented coating systems • Keeps paint film "open" resulting in better through-drying of quick dry and baking systems; can prevent wrinkling and orange peel on paint film surface
15% Potassium Hex-Cem®	S	Potassium Octoate	15	0.2-1.0	Low	• Primary catalyst for rigid urethane foams, accelerator additive for unsaturated polyesters, and pot life stabilizer for two-component polyurethane systems • Capable of stabilizing the rheological and pot life behavior of waterborne two-component polyurethane systems and decreasing discoloration of UPS systems caused by cobalt
15% Potassium Hex-Cem® Water White	S	Potassium Octoate	15	0.2-1.0	Low	• Potassium octoate synergist with cobalt for gel coats and UPR systems • Interacts positively within the system to maintain reactive cobalt levels and reduce gel-time drift

**S= Solventborne, W= Waterborne*

***Calculated on total solid binder*

Application recommendations and data on the back →

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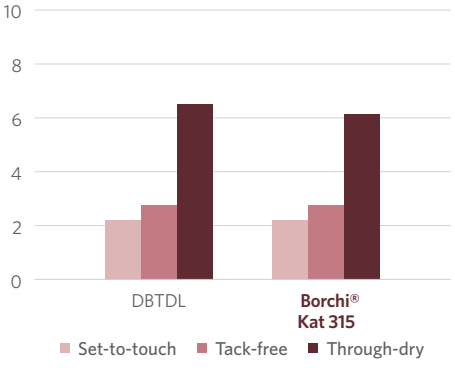
Catalyst recommendations for specific applications

Metal	Product Name	Waterborne	Solventborne	Solvent-Free	Unsaturated Polyester	2-comp. PU Coatings		PU-Foams	Silicones	
						Clear	Pigmented		RTV 2-	PU- mod.
Bismuth	Borchi® Kat 24	○	●	●	○	●	●	● Flex / Elast.	○	●
	Borchi® Kat 315	○	●	●	○	●	●	●	●	●
Zinc	22% Zinc Hex-Cem®	○	●	●	○	●	●	○	○	○
Mixed Metals	Borchi® Kat 0243	○	●	○	○	●	◒	◐	○	◐
Potassium	15% Potassium Hex-Cem®	◒	●	○	●	○	○	◐ Rigid	○	○
	15% Potassium Hex-Cem® Water White	●	●	●	●	○	○	◐ Rigid	○	○
Lithium	2% Lithium Ten-Cem® WS	●	●	○	◒	◒	◒	○	◐	◐

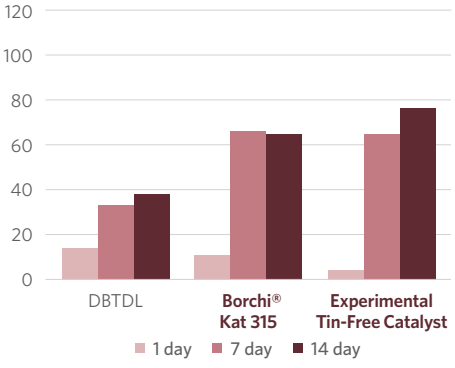
● *Recommended* ◒ *Suitable* ◒ *Only in combination* ◐ *Only in specific applications* ○ *Not suitable*

Comparing dry times, hardness, and pot life with DBTDL and tin-free catalysts*

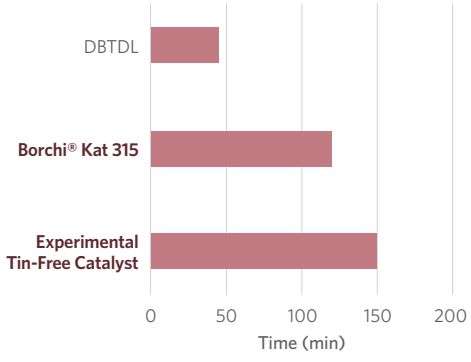
Faster Through-Drying Times with Borchi® Kat 315
in hours, white topcoat for protective and marine



Better Hardness with Tin-Free Catalysts
in seconds, high solids white topcoat for metal



Longer Pot Life with Tin-Free Catalysts
40°C, white topcoat for airmix and airless application



**includes experimental tin-free catalyst currently in development*

For more information, please reach us at **borchers.com/contact**

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