



## BCAT-E20 Polyurethane Catalyst

BCAT-E20 is a highly reactive catalyst based on bismuth carboxylate used as accelerator for two-component polyurethane systems. It contains no additional organic complexing agents without the toxicity concerns. BCAT-E20 is an ecologically safe replacement for other polyurethane catalysts, especially for amines and tin-based products like DBTDL. It can pass China and EU environmental regulations.

<b>Typical Properties</b>	Appearance Color (Fe-Co) Density (g/cm <sup>3</sup> , 25°C) Viscosity (mPa.s, 25°C) Metal content %	Clear, light yellow transparent liquid ≤4 1.165 6700±1500 20±0.5
<b>Solubility</b>	Soluble in normal polyurethane raw materials (polyether polyol, plasticizer)	
<b>Applications</b>	BCAT-E20 is a wide applicable catalyst, recommended to be used in 2-component polyurethane systems both on cast elastomers and foams, especially for soft gel, insole, and etc. Furthermore, It can be used in coatings industry on solventborne or solvent-free one/two-component polyurethane systems and stoving enamels based on blocked isocyanate, e.g. for automotive refinish coatings, general industrial coatings as well as coil coatings formulated with blocked isocyanates.	
<b>Advantage Descriptions</b>	<b>BCAT-E20 is fine controlled synthetic bismuth carboxylate catalyst. The unique characteristics are as following:</b> <ul style="list-style-type: none"><li>▲ To accelerate 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 to reduce the moisture influence and reduce the CO<sub>2</sub> bubbles.</li><li>▲ It can be used as a replacement for tin-based products like dibutyl tin dilaurate (DBTDL), in many cases yielding better properties than for systems catalyzed by DBTDL. Additionally, it can be used as a replacement for organic mercury or organic lead in some applications.</li><li>▲ Much better hydrolysis resistance than T9 (stannous octoate).</li><li>▲ It can be used alone or in combination with other catalysts.</li></ul>	
<b>Typical Usage Levels</b>	<ul style="list-style-type: none"><li>• Suggest adding in polyol component after vacuum degassing.</li><li>• Levels of 0.02-0.8% as supplied by weight on total polyol volume.</li><li>• No recommendation to add into isocyanate component. To avoid gel, please do test before adding in isocyanate component to make sure the storage stability.</li><li>• For coatings application, suggest separating packaged with supply form to get better catalytic properties.</li></ul>	
<b>Handling &amp; Storage</b>	BCAT-E20 is sensitive to moisture. There, exposure to atmosphere should be avoided. Product should be stored in a cool, dry environment away from sunlight and excessive heat.	
<b>Package</b>	25kg/200kg in HDPE drum	
<b>Shelf Life</b>	The unopened shelf life is 24 months from the date of manufacture.	

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