



## Technical Data Sheet

**Product Name:** Polyurethane Organic Bismuth Catalyst BCAT-E28A

### Product Brief:

BCAT-E28A is an organic bismuth catalyst by fine controlled synthesis. It does not contain restricted heavy metals, polycyclic aromatic hydrocarbons, o-phenyl ester and other organic components or solvents. It can be used as eco-friendly substitute for traditional organotin, mercury and lead catalysts. It can pass strict environmental regulations in the United States and the European Union. It can also be used for polyurethane foam instead of amine tin catalyst.

### Typical Properties:

Appearance	Yellowish transparent liquid
Colour (Fe-Co)	$\leq 3$
Density (g/cm <sup>3</sup> , 25°C)	1.304
Viscosity (mPa.s, 25°C)	2400 $\pm$ 500
Smell	With special compound smell

**Solubility:** Soluble in normal polyurethane raw materials (polyether polyol, plasticizer)

### Applications:

- It is widely used in polyurethane industry. It can be used in polyurethane elastomers and foam. It is especially recommended for polyurethane soft rubber, insoles and gels.
- It is recommended to replace organic tin in coating industry. It can be used in two-component polyurethane coating or one-component closed isocyanate coating, such as automotive repair paint, industrial paint, closed coil coating, etc.

### Features & Advantage:

- ❖ BCAT-E28A is an organic bismuth catalyst by fine controlled synthesis. It does not contain other organic components and solvents, and has the typical characteristics of bismuth environmental protection catalyst;
- ❖ Safety and environmental protection, can replace organic lead, mercury and tin in some applications;
- ❖ Compared with T9, it has better anti-hydrolysis stability;
- ❖ Promote the reaction of NCO with OH. It can be applied to heating curing and room temperature curing, reduce the side reaction between water and NCO group and reduce the formation of CO<sub>2</sub> bubbles;
- ❖ It has good compatibility and can be used alone or in combination with other organometallic compounds.

### User's Guide:

- If it is used for polyurethane two-component composite, it is recommended to add it into polyol (P material) component. It is recommended to add it after dehydration and stir evenly;
- If it is used for coating, it is recommended to add it before on-site construction, which will have better effect than premixing.
- The general dosage is 0.02 ~ 0.8% of Pu weight.
- It is not recommended to add it into isocyanate component (material I). If it must be added, the applicability and storage stability test must be carried out first.
- Be sure to seal and store immediately after use.

### Handling & Storage:

Product should be stored in a cool, dry environment away from sunlight, excessive heat and rain.

**Package:** 25kg/200kg in HDPE drum

**Shelf Life:** The unopened shelf life is 24 months from the date of manufacture. After shelf life, please do test to make sure the catalytic properties before use.

All recommendation and technical information (whether verbal, written or by way of product evaluations), including any suggested formulations contained herein is provided for information purpose only and does not constitute a legal contract as well as suitable for relating to the third party rights. The conditions of your use and application of our products, technical assistance and information are beyond our control. Therefore, no guaranty or warranty for your evaluation is made. Consequently the user assumes all risks in connection with the use and handling of this product based on our technical information and recommendations, final determination of suitability of this product is the sole responsibility of the user.