



## Technical Data Sheet

**Product Name:** Non Foaming Polyurethane Catalyst CUCAT-V17/V18

### Product Brief:

It is specially developed for the strict regulations of TVOC in the new national standard GB36246-2018. The products do not contain isooctanoic acid and neodecanoic acid. The two characteristics of reaction type and high boiling point fully ensure that the products meet the strict regulations of TVOC.

### Typical Properties:

Model	Appearance	Colour (Fe-Co)	Density g/cm <sup>3</sup> (25°C)	Viscosity mPa.s (25°C)
CUCAT-V17	Transparent - slightly turbid amber liquid	≤13	1.030	10000±3000
CUCAT-V18	Transparent slightly turbid brown liquid	≤15	1.075	2700±500

### Applications:

- It is widely used in sports venues such as Plastic Cement and Rubber Runway, etc.

### Features & Advantage:

- ❖ **It is specially developed for the strict regulations of TVOC in the new national standard GB36246-2018. The products do not contain isooctanoic acid and neodecanoic acid. The two characteristics of reaction type and high boiling point fully ensure that the products meet the strict regulations of TVOC.**
  - I. The boiling point is above 315 °C, which is much higher than 250 °C defined by VOC, and it is not a VOC substance; Exceeding the upper limit of 287 °C specified in the TVOC standard for synthetic materials in sports venues, which will hardly increase the TVOC of synthetic materials. It solves the problem of non-compliance of TVOC regulations caused by the common organic bismuth zinc catalyst containing isooctanoic acid and neodecanoic acid.
  - II. V17 and V18 are both reactive catalyst. The catalyst can eventually be polymerized or grafted in the polymer chain segment to become a part of the polyurethane polymer runway. There is no material in free state, so they basically will not increase the VOC or TVOC of the plastic runway.
- ❖ **The mixing of components A and B has a long flow period, which is conducive to leveling; Fast post curing, shorten the waiting time of post process and speed up the construction progress.**

The function of V18 is similar to that of organic bismuth and V17 is similar to organic zinc. Reasonable combination of V17 and V18 can ensure sufficient leveling time and ideal curing time.
- ❖ **It can be premixed into component B in the production workshop in advance to avoid the trouble of adding on the construction site. Even if the material B is not dehydrated, it will not affect the storage stability. It solves the problem that the activity of ordinary bismuth zinc catalyst will gradually decrease and eventually fail when it is pre added in the component B.**

V17 and V18 improve the problem that the previous products cannot be premixed, pre added and diluted, and are flexible and convenient to use.

### User's Guide:

- V series catalyst can be used alone. In order to obtain better post curing dryness and construction process, it is recommended to use it in a certain proportion according to the formula needs. The recommended compounding ratio is V18: V17 = 1: (0.5-2).
- The addition amount is generally 0.1-0.8% (based on component B), which can be added during production or construction according to actual needs; Follow the principle of less dosage in summer and more in winter; It is not recommended to add into component A (isocyanate). If a component must be added, a feasibility test is necessary to avoid the risk of gelation in synthetic process and storage tank.

### Notices:

- ◆ V17 and V18 products, whether used alone, mixed or diluted, will not affect their extremely high storage stability.
- ◆ V17 and V18 can be diluted with general plasticizer, polyether or common solvent, but solvent is not recommended due to TVCO control.



**Handling & Storage:**

Product should be stored in a cool, dry environment away from sunlight, excessive heat and rain. The color of the product may gradually deepen during storage, which is a normal phenomenon and does not affect the catalytic effect.

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

**Shelf Life:** The unopened shelf life is 18 months from the date of manufacture. After shelf life, please do test to make sure the catalytic properties before use.

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