Technical Data Sheet

Product Name: Anti-hydrolysis Organotin Delayed Catalyst TCAT-S029

Typical Properties：

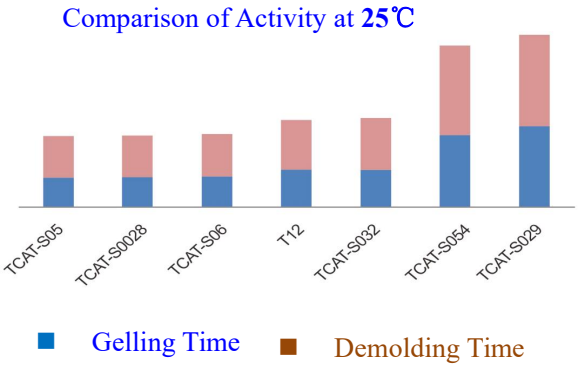
Model	Appearance	Colour (Fe-Co)	Density g/cm3 (25℃)	Viscosity mPa.s (25℃)	Odor
TCAT-S029	Colorless to yellowish clear liquid	＜4	0.055 - 1.095	25 - 85	With special odor of chemical compound

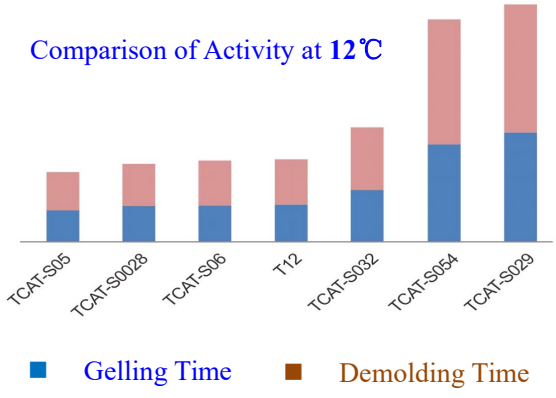
Solubility： Easily soluble in polyester and polyether polyol.

Features & Advantage:

TCAT-S029 is developed to solve the problem that common organometallic catalysts lose activity gradually in systems containing trace moisture, acid, alkali, etc, which cannot be stored stably for a long time. TCAT-S029 is an anti-hydrolysis organic tin catalyst, with the following characteristics:

- **Good latency and long liquidity.** TCAT-S029 is a delayed catalyst with a significantly longer flowable time in a low viscosity state than ordinary organotin DBTDL (T12).
- **Thermal active gel type catalyst, fast post curing.** At room temperature, the catalytic activity is relatively low. As the temperature increases, the catalytic activity significantly increases, strongly promoting the reaction between - NCO and - OH. This characteristic is suitable for molding processes that require high temperature and rapid forming, such as the extrusion process of high-strength polyurethane composite materials, the RIM process for producing automotive protective panels, and the production process of structurally complex products and large castings.
- **Hydrolysis resistance and good storage stability.** It can be premixed into the aqueous formulation system in advance. Compared with ordinary organotin, such as DBTDL (T12), it has more durable hydrolysis resistance, solves the technical problem of hydrolysis failure of ordinary metal catalyst in aqueous formula.





Applications：

It is widely used in all fields of polyurethane. CASE (coating, adhesive, sealant, elastomer). It is an excellent gel catalyst especially for suitable for molding processes that require high temperature and rapid forming, such as the extrusion process of high-strength polyurethane composite materials, the RIM process for producing automotive protective panels, and the production process of structurally complex products and large castings. It can be used alone or in combination with the Yourun RM series thermosensitive catalyst for more flexible operation time and post curing time.

User's Guide:

- The general dosage is 0.03-0.3% of the weight of PU. For two-component polyurethane, the general addition amount is 0.05-0.5% of the weight of polyol components. For foaming system, it can be pre mixed into aqueous polyol components.
- Normally, the packaging container must be kept sealed, and the can mouth should be sealed 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 expiration, it can still be used as qualified product if the catalytic activity does not attenuate.