



Product Name: Chelated tin high efficiency catalyst TCAT-NS01

Typical Properties:

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| Appearance | Light yellow to amber transparent liquid |
| Chroma(Fe-Co) | ≤10 |
| Density (g/cm ³ , 25℃) | 1.225 |
| Viscosity (mPa.s, 25℃) | 10-50 |
| Smell | With light smell. |

Solubility: It has good compatibility with various silane resins, polyurethane resins and plasticizers.

Applications:

It has excellent catalytic effect in various curing systems containing active silane groups, including MS polymer (silane terminated polyether polymer), SPUR (silane terminated polyurethane polymer), silicone polymer, etc., which are widely used in sealants, adhesives, rubber (elastomer), coatings and other products based on the above resins.

As a catalyst in the field of polyurethane, compared with other organotin, it has the characteristics of long pot life and fast post curing.

It is used as an efficient polycondensation catalyst in polyester synthesis.

Features & Advantages:

TCAT-NS01 is a new generation of high-efficiency chelated tin. It is a high-performance catalyst for the reaction of silicone, polyurethane and polyester. Its catalytic activity is much higher than that of traditional dibutyltin dilaurate (T-12). For silane system, it has the following characteristics

- ▲ **High catalytic activity, fast curing efficiency and promote deep curing.**
It can efficiently promote the hydrolysis and polycondensation of terminal silane, quickly promote the surface drying and body drying of the system, and significantly promote the deep curing of thick coating system.
- ▲ **High catalytic efficiency at low temperature to solve the problem of slow curing in winter.**
It solves the disadvantage that the activity of traditional T-12 catalyst decreases greatly or even loses at low temperature.
- ▲ **Less addition and low comprehensive cost.**
At the same curing rate, the addition amount is only one tenth of T-12 or even less.
- ▲ **Stable storage.**
On the premise that the dosage gets the same catalytic efficiency, the storage stability is better than T-12.

User's Guide:

- The usage amount is 0.05-1% of the total amount of the system, which can be increased or decreased according to the actual requirements.
- When the ambient temperature is lower than 15 °C, TCAT-NS01 will gradually crystallize until it is completely solidified; It is not recommended to use when there is crystal. It needs to be heated and melted completely before using it; The recommended melting method is: keep the package closed and put the whole barrel into a hot air circulation oven at 40-50°C. Generally, it can be completely melted in 24-48 hours. After confirming the full solution, it is recommended to shake for a few minutes to ensure more homogeneity.
- TCAT-NS01 has certain hygroscopicity and should not be exposed to the air. After normal use, the tank mouth must be closed immediately.

Handling & Storage: Please store in a cool, dry environment away from sunlight and rain. It is suggested that the storage ambient temperature should be > 20 °C to avoid crystallization;

Package: 25kg/200kg in HDPE drum

Shelf Life: Unopened shelf life 12 months from the date of manufacture. After expiration, it can still be used if it passes the inspection.

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