MANTA

Technical Data Sheet

Version: 1.0

Manta CAT-DBTA

High-Efficiency Organotin Catalyst (Dibutyltin Diacetate)

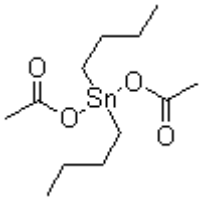
Description

Manta CAT-DBTA is Dibutyltin Diacetate (DBTA/DBTDA) organotin catalyst designed for applications requiring rapid reaction kinetics. Due to its significantly higher tin content (approx. 33.4% - 34.4%) compared to standard DBTDL, it acts as a much more potent catalyst for both polyurethane and silicone systems.

Manta CAT-DBTA is a multi-purpose catalyst for accelerating ester exchange, silanol condensation, and polyurethane crosslinking reactions. It is particularly suited to high-speed industrial manufacturing where short cycle times and quick green strength are critical.

Performance equivalent to industry benchmarks such as TIB KAT 250 and Metasol DBTA.

Typical Physical Properties

Manta Code:	CAT-DBTA
Chemical Name:	Dibutyltin Diacetate (DBTA/DBTDA)
CAS NO.	1067-33-0
EC NO.	213-928-8
Formula	$C_{12}H_{24}O_4Sn$
Molecular Weight:	351.03
Appearance:	Slightly yellow liquid (No mechanical impurities)
Tin Content (%):	33.4% – 34.4%
Density (ρ25°C, g/cm³)	1.31
Color (Pt-Co):	≤200
Volatile (%):	≤ 0.4%
Molecular Structure	

Features

- Ultra-Fast Catalytic Speed: Offers significantly shorter gel times and tack-free times than standard organotin catalysts.
- High Tin Density: Optimized for rigid foam structures and high-performance adhesives where rapid curing is required.
- Versatile Reactivity: Highly effective across three major reaction types: Transesterification, Silanol Condensation, and PU Crosslinking.
- Excellent Solubility: Miscible with a wide range of organic solvents and polyol systems.

Applications

1. Rigid Polyurethane Foams

A highly effective catalyst in the production of rigid urethane foams. It provides rapid structural development and controlled expansion, ensuring consistent high-density insulation performance.

2. RTV Silicone & Sealants

Used as a high-speed crosslinking catalyst for room-temperature vulcanizing (RTV) silicone rubbers. It is particularly effective in moisture-curing systems for adhesives and caulking agents that require a very fast skin-over time.

3. Industrial Paints & Coatings

Applied in the paint industry to accelerate the curing of specialized resin systems. It is often used in high-solids or fast-drying industrial topcoats where throughput speed is a priority.

4. Adhesives & Caulking Agents

Acts as a powerful promoter for the crosslinking reaction in high-performance bonding agents, ensuring the adhesive reaches full strength quickly for subsequent processing or construction.

5. Esterification & Transesterification

Functions as an efficient catalyst for the synthesis of specialty esters and plasticizers, allowing for lower reaction temperatures and increased production efficiency.

Packaging

In 25kg pail, 200kg drum.

Safety and Storage

Storage: Store in a cool, dry, and well-ventilated area. Manta CAT-DBTA is sensitive to moisture; ensure containers are tightly sealed to prevent hydrolysis.

Shelf Life: 12 months in original, unopened containers when stored correctly.

Contact Information

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