MANTA

Technical Data Sheet

Version: 1.0

Manta CAT-DOTDL

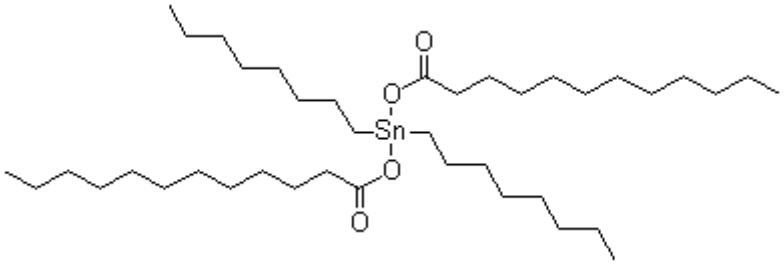
Organotin Catalyst & Lubricant (Dioctyltin Dilaurate)

Description

Manta CAT-DOTDL (Dioctyltin Dilaurate) is an organotin additive. It offers superior lubrication, weather resistance, and high transparency.
In PVC processing, it offers the best self-lubricating properties among organotins and prevents sulfur staining. In the silicone and polyurethane industries, it acts as a high-purity catalyst for applications where standard butyltins are restricted.
Performance equivalent to industry standards such as TIB KAT 216 and FASCAT 4208.

Typical Physical Properties

Manta Code:	CAT-DOTDL
Chemical Name:	Dioctyltin dilaurate
CAS NO.	3648-18-8
EC NO.	222-883-3
Formula	$C_{40}H_{80}O_4Sn$
Molecular Weight:	743.77
Appearance:	Light yellow transparent oily liquid
Tin Content (%):	15.0-16.0
Density (ρ25°C, g/cm³)	1.010-1.030
Refractive Index (n25/D)	1.470 – 1.474
Moisture Content (%)	≤ 1.0%
Molecular Structure	



Features

- Superior Lubricity: Provides exceptional internal and external lubrication, reducing friction during polymer processing and improving surface finish.
- Non-Sulfur Polluting: Resistant to sulfur staining (vulcanization pollution), ensuring the long-term color stability of the end product.
- High Transparency: Maintains crystal clarity in flexible and rigid PVC without exudation or plate-out.
- Synergistic Performance: Exhibits excellent synergy when used in combination with mercaptide tins or Ba/Zn stabilizers to boost overall stability.

Applications

1. Silicone Rubber

Used as a high-purity catalyst for room-temperature vulcanized (RTV) silicone rubbers.

2. PVC Packaging

Functions as a primary stabilizer and lubricant for flexible PVC films, sheets, and hoses used in packaging.

3. Rigid Transparent Packaging

Acts as a high-efficiency lubricant in rigid transparent containers. Recommended dosage is typically

below 1.5 phr to maintain optimal clarity and processing throughput.

4. Polyurethane (PU) Coatings & Elastomers

Serves as a catalyst for PU systems and as an alternative to DBTDL where dibutyltin compounds are restricted.

5. Weather-Resistant Films

Enhances the outdoor durability and UV stability of PVC products, preventing yellowing and maintaining mechanical integrity under fluctuating environmental conditions.

Packaging

In 25kg pail, 200kg drum.

Safety and Storage

Storage: Store in a cool, dry, and well-ventilated warehouse. Keep the container hermetically sealed after use to minimize contact with air and moisture.

Safety: Avoid contact with skin and eyes. In case of accidental contamination, rinse immediately with large amounts of water and seek medical advice if necessary.

Shelf Life: 12 months from the date of production in original, unopened containers.

Contact Information

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