

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations SDS ID: RUC072

Issue date: 9/5/2002 Revision date: 7/26/2022 Supersedes: 5/19/2017 Version: 1.0

SECTION 1: Identification

1.1. Identification

 Product form
 : Substance

 Trade name
 : Cotin™ 430

 CAS-No.
 : 3648-18-8

 Formula
 : C40H80O4Sn

Synonyms : Dioctylbis[(1-oxododecyl)oxy]-stannanne

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Catalyst

1.3. Supplier

Aurorium

201 North Illinois Street

Suite 1800

Indianapolis, IN, 46204

USA

T+1-317-247-8141

SDS@aurorium.com-www.aurorium.com

1.4. Emergency telephone number

Emergency number : Aurorium: +1-317-247-8141

CHEMTREC (USA): +1-800-424-9300 CHEMTREC (International):+1-703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Reproductive toxicity Category 1B H360 May damage fertility or the unborn child

Specific target organ to xicity (repeated exposure) Category 1 H372 Causes damage to organs through prolonged or repeated

exposure

Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US) : Danger

Hazard statements (GHS US) : H360 - May damage fertility or the unborn child

H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US) : P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe vapors, mist.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves, protective clothing, eye protection, face protection.

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P264 - Wash hands thoroughly after handling.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P405 - Store locked up.

 $P501-Dispose\ of\ contents\ or\ container\ to\ hazardous\ or\ special\ was te\ collection\ point, in$

accordance with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name	Product identifier	%	GHS US classification
Dioctyltin dilaurate (Main constituent)	CAS-No.: 3648-18-8	≈ 100	Repr. 1B, H360 STOT RE 1, H372

Full text of hazard classes and H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : First aider: Pay attention to self-protection. Do not inhale vapor. Wear gloves.

First-aid measures after in halation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory

symptoms: Get immediate medical advice/attention.

First-aid measures after skin contact : Wash immediately with plenty of water. If skin irritation or rash occurs: Get medical

advice/attention.

First-aid measures after eye contact : Immediately rinse with water for a prolonged period while holding the eyelids wide open. Get

immediate medical advice/attention.

First-aid measures after in gestion : Rinse mouth out with water. Do not induce vo miting. Immediately call a poison center or

doctor/physician.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May cause damage to organs (thymus) through prolonged or repeated exposure.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Foam. Carbon dioxide (CO2). Dry chemical.
Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

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5.2. Specific hazards arising from the chemical

Fire hazard : Not flammable.

Explosion hazard : Product is not explosive.

Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide. Tin (organic compounds).

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire with normal precautions from a reasonable distance. Avoid contact with skin and eyes.

Protection during firefighting : Wear recommended personal protective equipment. Complete protective clothing. Self-contained

breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ventilate spillage area. Mark out the contaminated area with signs and prevent access to

unauthorized personnel.

6.1.1. For non-emergency personnel

Emergency procedures : Do not get in eyes, on skin, or on clothing. Avoid breathing dust/fume/gas/mist/vapors/spray.

Evacuate unnecessary personnel.

6.1.2. For emergency responders

Emergency procedures : Do not attempt to take action without suitable protective equipment.

6.2. Environmental precautions

Do not allow product to spread into the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or

streams.

Methods for cleaning up : Absorb spilled material with sand or earth. Shovel into suitable and closed container for disposal.

Wash contaminated area with large amounts of water.

Other information : Collect all waste in suitable and labeled containers and dispose according to local legislation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For wasted isposal after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wear personal protective equipment. Avoid any direct contact with the product.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry place. Store in a closed container. Store in a well-ventilated place.

Incompatible products : Strong acids. Strong bases. Strong oxidizers.

Incompatible materials : None known.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Cotin™ 430 (3648-18-8)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Tin, organic compounds, as Sn	
ACGIH OEL TWA	0.1 mg/m³ Tin (organic compounds)	
ACGIH OEL STEL	0.2 mg/m³ Tin (organic compounds)	
Remark (ACGIH)	TLV® Basis: Eye & URT irr; headache; nausea; CNS & immune eff. Notations: Skin; A4 (Not classifiable as a Human Carcinogen)	
Regulatory reference	ACGIH 2022	
USA - OSHA - Occupational Exposure Limits		
OSHA PEL (TWA) [1] 0.1 mg/m³ Tin (organic compounds)		
USA - NIOSH - Occupational Exposure Limits		
NIOSH REL (TWA) 0.1 mg/m³ Tin (organic compounds)		
Remark (NIOSH) Skin notation		

8.2. Appropriate engineering controls

Appropriate engineering controls : Provide local exhaust or general room ventilation. Emergency eye wash fountains and safety

showers should be available in the immediate vicinity of any potential exposure.

Environmental exposure controls : Avoid release to the environment. Prevent entry to sewers and public waters.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Chemical resistant gloves (according to European standard EN 374 or equivalent). Neoprene protective gloves. Nitrile rubber g loves. Protective gloves made of PVC

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Chemical resistant safety shoes. Long sleeved protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Clear to light yellow.
Color : pale yellow
Odor
Odor threshold : Mild odor
Odor threshold : No data available

pH : 4.5 – 6.5 Aqueous solution

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Melting point : No data available

Freezing point : $2 \,^{\circ}\text{C}$ Boiling point : $674 \,^{\circ}\text{C}$

Flash point : 198 °C (Closed cup)

Relative evaporation rate (butyl acetate=1) : < 1

Flammability (solid, gas) : No data available Vapor pressure : 0.002 Pa (25°C)

Relative vapor density at 20 °C : > 1

Relative density : No data available
Density : 0.998 g/cm³
Solubility : insoluble in water.

Partition coefficient n-octanol/water (Log Pow) : 9.26

Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity, kinematic : 27.796 mm²/s
Viscosity, dynamic : 27.74 mPa.s
Explosion limits : No data available
Explosive properties : Product is not explosive.

Oxidizing properties : No.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Stable under normal conditions of use.

10.4. Conditions to avoid

Overheating. Open flame. Water, humidity. Moisture.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Tin (organic compounds).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified (No data available)

Cotin™ 430 (3648-18-8)

LD50 oral rat 6000 mg/kg

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Cotin™ 430 (3648-18-8)	
LD50 dermal rat	> 2000 mg/kg
ATE US (oral)	6000 mg/kg body weight
Skin corrosion/irritation	: Not classified (OECD 439 method) pH: 4.5 – 6.5 Aqueous solution
Serious eye damage/irritation	: Slightly irritant but not relevant for classification (OECD 405 method) pH: 4.5 – 6.5 Aqueous solution
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified No test data is available Not listed (IARC, NTP, US OSHA)
Reproductive toxicity	: May damage fertility or the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard Viscosity, kinematic	: Not classified : 27.796 mm²/s
Symptoms/effects	: May cause damage to organs (thymus) through prolonged or repeated exposure.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

Cotin™ 430 (3648-18-8)	
Persistence and degradability	Not readily biodegradable. Hydrolyses.

12.3. Bioaccumulative potential

Cotin™ 430 (3648-18-8)	
Partition coefficient n-octanol/water (Log Kow)	9.26
Bio accumulative potential	Bio accumulation is not expected to occur.

12.4. Mobility in soil

Cotin™ 430 (3648-18-8)	
Mobility in soil	Not established

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations.

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Sewage disposal recommendations

: Do not dispose of waste into sewer.

Product/Packaging disposal recommendations

: Dispose of contents or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: Transport information

In accordance with DOT/IMDG/IATA

DOT	IMDG	IATA	
14.1. UN number			
Not regulated for transport	Not regulated for transport		
14.2. Proper Shipping Name			
Notapplicable	Not applicable	Notapplicable	
Transport document description			
Notapplicable	Not applicable	Notapplicable	
14.3. Transport hazard class(es)			
Not applicable Not applicable		Notapplicable	
14.4. Packing group			
Notapplicable	Not applicable	Notapplicable	
14.5. Environmental hazards			
Not applicable	Notapplicable	Not applicable	
No supplementary information available	No supplementary information available		

14.6. Special precautions for user

DOT

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Dioctyltin dilaurate	3648-18-8	Present	Active	

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This product or mixture is NOT known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

Cotin™ 430 (3648-18-8)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Cotin™ 430 (3648-18-8)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Cotin™ 430 (3648-18-8)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on the NCI (Vietnam - National Chemical Inventory)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

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Other information : ™ Trademark owned by or licensed to the Aurorium group of companies, registered in the United

States or elsewhere.

Full text of H-phrases	
H360	May damage fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure

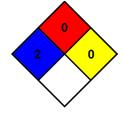
NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and

sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire

conditions.



Hazard Rating

NFPA fire hazard

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Health : 2 Moderate Hazard - Temporary or minor injury may occur

: * - Chronic (long-term) health effects may result from repeated overexposure

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT

react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Indication of changes:

All chapters have been modified since the previous version (new software).

Safety Data Sheet (SDS), USA

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