



# Cotin™ 280

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)  
Revision date: 9/12/2025 Supersedes: 3/8/2011 Version: 4.0

### SECTION 1 Identification

#### 1.1. Product identifier

Product form : Substance  
Substance name : Cotin™ 280

#### 1.2. Other means of identification

Other means of identification : Organotin carboxylate

#### 1.3. Recommended use of the chemical and restrictions on use

Recommended use : Catalyst  
Restrictions on use : None

#### 1.4. Supplier's details

Aurorium  
201 North Illinois Street  
Suite 1800  
Indianapolis, IN, 46204  
USA  
T +1-317-247-8141  
[SDS@aurorium.com](mailto:SDS@aurorium.com) - [www.aurorium.com](http://www.aurorium.com)

#### 1.5. Emergency phone number

Emergency number : Aurorium: +1-317-247-8141  
CHEMTREC (USA): +1-800-424-9300  
CHEMTREC (International): +1-703-527-3887

### SECTION 2 Hazard Identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Skin sensitization, Category 1A	H317	May cause an allergic skin reaction.
Reproductive toxicity, Category 2	H361	Suspected of damaging fertility or the unborn child.
Specific target organ toxicity — Repeated exposure, Category 1	H372	Causes damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment — Acute Hazard, Category 3	H402	Harmful to aquatic life.
Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412	Harmful to aquatic life with long lasting effects.

Full text of H statements : see section 16

#### 2.2. Label elements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger  
Hazard statements (GHS US) : H302 - Harmful if swallowed  
H315 - Causes skin irritation

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### Precautionary statements (GHS US)

H317 - May cause an allergic skin reaction  
H361 - Suspected of damaging fertility or the unborn child  
H372 - Causes damage to organs through prolonged or repeated exposure  
H412 - Harmful to aquatic life with long lasting effects  
: 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, spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P272 - Contaminated work clothing must not be allowed out of the workplace.  
P273 - Avoid release to the environment.  
P280 - Wear protective clothing, eye and face protection, protective gloves.  
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.  
P330 - Rinse mouth.  
P302+P352 - If on skin: Wash with plenty of water.  
P362+P364 - Take off contaminated clothing and wash it before reuse.  
P333+P313 - If skin irritation or rash occurs: Get medical attention.  
P314 - Get medical advice or attention if you feel unwell.  
P405 - Store locked up.  
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

### 2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

### 2.4. Hazards not otherwise classified

No additional information available

### 2.5. Unknown acute toxicity

No additional information available

## SECTION 3 Composition/information on ingredients

### 3.1. Substances

Name : Cotin™ 280

Name	Product identifier	%	GHS US classification
Organotin carboxylate*	CAS-No.: Trade Secret	>80	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Skin Sens. 1A, H317 Repr. 2, H361 STOT RE 1, H372 Aquatic Acute 3, H402 Aquatic Chronic 3, H412

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

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

### 3.2. Mixtures

Not applicable

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### SECTION 4 First aid measures

#### 4.1. Description of necessary first-aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Wear gloves.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Call a poison center or a doctor if you feel unwell.

#### 4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: Dizziness, headaches, nausea. May cause minor irritation to the respiratory tract and to other mucous membranes. Risk of lung edema.
Symptoms/effects after skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: May cause slight temporary irritation.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract. Ingestion may cause nausea and vomiting. Harmful if swallowed.
Chronic symptoms	: Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

#### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Treat symptomatically. Symptoms may be delayed.
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### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a solid water stream as it may scatter and spread fire.

#### 5.2. Specific hazards arising from the chemical

Fire hazard	: This product is not classified as flammable or combustible. Could burn but does not ignite readily.
Explosion hazard	: Product is not explosive.
Hazardous decomposition products in case of fire	: Carbon oxides (CO, CO <sub>2</sub> ). Tin (organic compounds).

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Do not get in eyes, on skin, or on clothing. Fight fire with normal precautions from a reasonable distance. Contain the extinguishing fluids by bunding.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: Do not dispose of fire-fighting water in the environment.

### SECTION 6 Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Ventilate spillage area. Keep unnecessary and unprotected personnel away from the spillage. Do not attempt to take action without suitable protective equipment.
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#### For non-emergency personnel

Emergency procedures	: Ventilate spillage area. Do not breathe vapors, mist, spray. Avoid contact with skin and eyes.
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### For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Turn leaking containers leak-side up to prevent the escape of liquid.
Environmental precautions	: Avoid release to the environment. Do not allow product to spread into the environment.

### 6.2. Methods and materials for containment and cleaning up

For containment	: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Turn leaking containers leak-side up to prevent the escape of liquid.
Methods for cleaning up	: Take up liquid spill into absorbent material. Do not use sawdust or other combustible material to absorb spilled material. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). Notify authorities if product enters sewers or public waters.
Other information	: Collect all waste in suitable and labeled containers and dispose according to local legislation.

For further information refer to section 8: "Exposure controls/personal protection", For further information refer to section 13

## SECTION 7 Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe vapors, mist, spray. Avoid contact with skin and eyes.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety procedures. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including incompatibilities

Storage conditions	: Store in a dry place. Store in a well-ventilated place. Store locked up.
Incompatible materials	: Strong oxidizing agents. Strong acids. Strong bases.

## SECTION 8 Exposure controls/personal protection

### 8.1. Control parameters

Organotin carboxylate	
USA - ACGIH - Occupational Exposure Limits	
ACGIH® TLV® TWA	≥ 0.1 mg/m³ Tin (organic compounds)
ACGIH® TLV® 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 2025
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA	≥ 0.1 mg/m³ Tin (organic compounds)
USA - Cal/OSHA - Occupational Exposure Limits	
Cal/OSHA PEL (OEL TWA)	0.1 mg/m³
Cal/OSHA STEL	0.2 mg/m³

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### Organotin carboxylate

Remark (Cal/OSHA)	S - Skin notation and Protecting Clothing
Regulatory reference	California Division of Occupational Safety and Health (Cal/OSHA) - Permissible Exposure Limit for Chemical Contaminants (Table AC-1)

### 8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Environmental exposure controls	: Do not allow product to spread into the environment. Avoid release to the environment.

### 8.3. Individual protection measures, such as personal protective equipment

#### Hand protection:

Wear suitable gloves resistant to chemical penetration

#### Eye protection:

Chemical goggles or safety glasses

#### Skin and body protection:

Long sleeved protective clothing. Chemical resistant safety shoes

#### Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

#### Thermal hazard protection:

Not applicable.

## SECTION 9 Physical and chemical properties

### 9.1. Basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear liquid.
Color	: Light yellow
Odor	: Irritating
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: -6 °C
Boiling point	: > 250 °C
Flash point	: 153 °C (Closed cup)
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: 0.141 Pa at 20°C
Relative vapor density at 20°C	: No data available
Relative density	: 1.14
Solubility	: Water: < 0.1 g/l
Partition coefficient n-octanol/water (Log Pow)	: 5.5
Auto-ignition temperature	: 479 °C
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: Not applicable
Explosive properties	: Product is not explosive.
Oxidizing properties	: Not oxidising.
Particle characteristics	: Particle size : Not applicable

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### 9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

## SECTION 10 Stability and reactivity

### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>). Tin (organic compounds).

## SECTION 11 Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Organotin carboxylate	
LD50 oral rat	890 mg/kg body weight (OECD 401 method)
LD50 dermal rabbit	> 2000 mg/kg

Skin corrosion/irritation : Causes skin irritation.  
(OECD 439 method)

Serious eye damage/irritation : Not classified  
(OECD 437 method)

Respiratory or skin sensitization : May cause an allergic skin reaction.  
Based on analogue

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified. Not listed (IARC, NTP, US OSHA)

Reproductive toxicity : Suspected of damaging fertility or the unborn child.  
Based on analogue

STOT-single exposure : Not classified

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.  
Based on analogue

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Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: Dizziness, headaches, nausea. May cause minor irritation to the respiratory tract and to other mucous membranes. Risk of lung edema.
Symptoms/effects after skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: May cause slight temporary irritation.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract. Ingestion may cause nausea and vomiting. Harmful if swallowed.
Chronic symptoms	: Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

## SECTION 12 Ecological information

### 12.1. Ecotoxicity

Hazardous to the aquatic environment, short-term (acute)	: Harmful to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Harmful to aquatic life with long lasting effects.

#### Organotin carboxylate

EC50 - Crustacea [1]	39 mg/l Daphnia magna (Water flea)
ErC50 algae	16 mg/l

### 12.2. Persistence and degradability

#### Cotin™ 280

Persistence and degradability	Not readily biodegradable. Not persistent.
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### 12.3. Bioaccumulative potential

#### Cotin™ 280

Partition coefficient n-octanol/water (Log Pow)	5.5
Bioaccumulative potential	Bioaccumulation is not expected to occur.

### 12.4. Mobility in soil

#### Cotin™ 280

Mobility in soil	Potential for mobility in soil is slight (insoluble in water).
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### 12.5. Other adverse effects

Ozone	: Not classified
Fluorinated greenhouse gases	: No

## SECTION 13 Disposal considerations

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

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DOT	IMDG	IATA
<b>14.1. UN number</b>		
UN3082	3082	3082
<b>14.2. Proper Shipping Name</b>		
Environmentally hazardous substances, liquid, n.o.s. (Organotin Compound)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Organotin Compound)	Environmentally hazardous substance, liquid, n.o.s. (Organotin Compound)
<b>14.3. Transport hazard class(es)</b>		
9	9	9
		
<b>14.4. Packing group</b>		
III	III	III
<b>14.5. Environmental hazards</b>		
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes
No supplementary information available		

### 14.6. Transport in bulk

Not applicable

### 14.7. Special precautions for user

#### DOT

UN-No. (DOT) : UN3082



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DOT Special Provisions (49 CFR 172.102)	: 8 - A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies. 146 - This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination. 173 - An appropriate generic entry may be used for this material. 335 - Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as "Environmentally hazardous substances, solid, n.o.s.," UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit must be leak-proof when used as bulk packaging. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 155
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: No Limit
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: No Limit
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

### IMDG

Special provision (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
Packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG)	: A

### IATA

Special provision (IATA)	: A97, A158, A197, A215
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964

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CAO max net quantity (IATA) : 450L  
ERG code (IATA) : 9L

### SECTION 15 Regulatory information

#### 15.1. Federal regulations

##### Cotin™ 280

SARA Section 311/312 Hazard Classes	Section 2 GHS classification
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All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

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

##### Organotin carboxylate

Listed on the Canadian DSL (Domestic Substances List)

##### EU-Regulations

##### Cotin™ 280

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

##### National regulations

##### Cotin™ 280

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active  
Listed on the Canadian DSL (Domestic Substances List)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on KECI (Korean Existing Chemicals Inventory)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

#### 15.3. 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

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date : 9/12/2025  
Data sources : Supplier's safety documents.  
Other information : ™ Indicates a proprietary trademark, registered in the US and/or elsewhere.

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Full text of hazard classes and H-statements	
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

NFPA health hazard

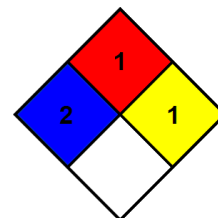
: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard

: 1 - Materials that must be preheated before ignition can occur.

NFPA instability

: 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.



HMIS Hazard Rating

Health

: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

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

Flammability

: 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical

: 0 Minimal Hazard

### Indication of changes:

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

Safety Data Sheet (SDS), USA (Aurorium)

Important Note: Please note that the information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. The information contained herein may change without prior notice. THIS SAFETY DATA SHEET SUPERSEDES ALL PREVIOUS EDITIONS.