

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 8/24/2021 Revision date: 12/21/2022 Supersedes: 8/24/2021 Version: 2.0

SECTION 1: Identification

1.1. Identification

Product form : Substance

Substance name : CIS-ACONITIC ACID,TRISODIUM SALT TRIHYDRATE (13C4, 99%) (1,2,3,6 : 3,4,5,6 AS 96:4)

CP 97%

CAS-No. : N/A
Product code : CLM-12323

Formula : C2*C4H3Na3O6·3H2O

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Cambridge Isotope Laboratories, Inc.

50 Frontage Rd

01810

ANDOVER, MA, 01810

USA

T 1-800-322-1174

cilsales@isotope.com - www.isotope.com

1.4. Emergency telephone number

Emergency number : 1-703-741-5970

Chemtrec 1-800-424-9300 24 hours

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation Category 2 H315 Causes skin irritation

Carcinogenicity Category 2 H351 Suspected of causing cancer (Inhalation, Dermal, oral)

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) : Warning

Hazard statements (GHS US) : H315 - Causes skin irritation

H351 - Suspected of causing cancer (Inhalation, Dermal, oral)

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

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

P264 - Wash hands, forearms and face thoroughly after handling.

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

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P302+P352 - If on skin: Wash with plenty of water.

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

P321 - Specific treatment (see supplemental first aid instruction on this label).

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste 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
CIS-ACONITIC ACID,TRISODIUM SALT TRIHYDRATE (13C4, 99%) (1,2,3,6:3,4,5,6 AS 96:4) CP 97% (Main constituent)	CAS-No.: N/A	100	Skin Irrit. 2, H315 Carc. 2, H351

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-aid measures after inhalation

First-aid measures after skin contact

First-aid measures after eye contact

First-aid measures after ingestion

- : If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.
- When symptoms occur: go into open air and ventilate suspected area. If not breathing give artificial respiration. Get medical advice/attention.
- Wash with plenty of soap and water. and soap. Get immediate medical advice/attention.
- Rinse cautiously with water for several minutes.
- Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.

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

Potential Adverse human health effects and symptoms

: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Symptoms/effects

Suspected of causing cancer (in contact with skin, if inhaled, if swallowed).

Symptoms/effects after inhalation

May be harmful if inhaled. May cause respiratory irritation.

Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion

Causes skin irritation. May cause eye irritation.

May be harmful if swallowed.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Carbon oxides (CO, CO2).

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Wear a self contained breathing apparatus. Do not enter fire area without proper protective

equipment, including respiratory protection.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear

recommended personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure

adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.1.2. 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".

6.2. Environmental precautions

Prevent entry to sewers and public waters. Do not allow to enter drains or water courses. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal.

Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes Avoid formation of dust and aerosols. Provide appropriate

exhaust ventilation at places where dust is formed.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Store in a well-ventilated place. Keep container tightly closed.

Storage conditions : Store in freezer (-20°C). Protect from light.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.

Materials for protective clothing:

Wear suitable protective clothing and gloves

Hand protection:

Wear suitable protective clothing and gloves

Eye protection:

Wear eye protection. Chemical goggles or face shield with safety glasses

Skin and body protection:

Wear suitable protective clothing, gloves and eye/face protection

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator

Personal protective equipment symbol(s):









SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid Appearance : Solid.

Color White to off-white Odor No data available Odor threshold No data available No data available рΗ 112 - 115 °C Melting point Freezing point No data available Boiling point : No data available : No data available Flash point

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Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : No data available
Vapor pressure : No data available
Relative vapor density at 20°C : No data available
Relative density : No data available
Molecular mass : 298.07 g/mol (Labeled)

Solubility : DMSO. slightly. Methanol. slightly.

Partition coefficient n-octanol/water (Log Pow) : No data available Auto-ignition temperature : No data available Decomposition temperature : No data available Viscosity, kinematic : No data available Viscosity, dynamic No data available **Explosion limits** No data available Explosive properties No data available Oxidizing properties No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable if stored under recommended conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Carbon oxides (CO, CO2).

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

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer (Inhalation, Dermal, oral).

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CIS-ACONITIC ACID,TRISODIUM SALT TRIHYDRATE (13C4, 99%) (1,2,3,6 : 3,4,5,6 AS 96:4) CP 97% (N/A)		
IARC group	2B - Possibly carcinogenic to humans	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
Viscosity, kinematic	: No data available	
Potential Adverse human health effects and	: This information is based on our current knowledge and is intended to describe the product for	
symptoms	the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.	
Symptoms/effects	: Suspected of causing cancer (in contact with skin, if inhaled, if swallowed).	
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.	
Symptoms/effects after skin contact	: Causes skin irritation.	
Symptoms/effects after eye contact	: May cause eye irritation.	
Symptoms/effects after ingestion	: May be harmful if swallowed.	

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and local

environmental control regulations.

Product/Packaging disposal recommendations : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed

professional waste disposal service to dispose of this material.

Ecology - waste materials : Dispose of as unused product.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

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14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable
Proper Shipping Name (TDG) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not applicable

TDG

Transport hazard class(es) (TDG) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (TDG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

No data available

TDG

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

н	CIS-ACONITIC ACID.TRISODIUM SAI	T TRIHYDRATE (13C4. 9	99%) (1.2.3.6 : 3	3.4.5.6 AS 96:4) CP 97% (N/A)	
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SARA Section 302 Threshold Planning Quantity

(TPQ)

Not subject to reporting requirements of the United States SARA Section 302.

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SARA Section 311/312 Hazard Classes Delayed (chronic) health hazard Immediate (acute) health hazard		

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
CIS-ACONITIC ACID,TRISODIUM SALT TRIHYDRATE (13C4, 99%) (1,2,3,6 : 3,4,5,6 AS 96:4) CP 97%	-	Not present	-	

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

CIS-ACONITIC ACID,TRISODIUM SALT TRIHYDRATE (13C4, 99%) (1,2,3,6: 3,4,5,6 AS 96:4) CP 97% (N/A)

Listed on TECI (Thailand Existing Chemicals Inventory)

15.3. US State regulations

No additional information available

SECTION 16: Other information

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Other information : This product is not radioactive. The data given for this product are those of the corresponding

unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the

corresponding unlabeled compound.

Full text of H-phrases	
H315	Causes skin irritation
H351	Suspected of causing cancer

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.