



SIGMA-ALDRICH

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Material Safety Data Sheet

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Version 1.30

Section 1 - Product and Company Information

Product Name	Cesium nitrate, 99%
Product Number	289337
Brand	Aldrich Chemical
Company	Sigma-Aldrich
Street Address	3050 Spruce Street
City, State, Zip, Country	SAINT LOUIS, MO 63103 US
Technical Phone:	314 771 5765
Fax:	800 325 5052
Emergency Phone:	414 273 3850 Ext. 5996

Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>	<u>EC no</u>	<u>Annex I Index Number</u>
CESIUM NITRATE	7789-18-6	No	232-146-8	

Formula	CsNO ₃
Synonyms	Nitric acid, cesium salt

Section 3 - Hazards Identification

Emergency Overview

Oxidizing. Irritant.
Contact with combustible material may cause fire. Irritating to eyes, respiratory system and skin.
Target organ(s): Blood, Central nervous system.

HMIS Rating	Health: 2*	Flammability: 0	Reactivity: 3	Special Hazard(s) : Oxidizer
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NFPA Rating	Health: 2	Flammability: 0	Reactivity: 3	Special Hazard(s) : Oxidizer
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*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Dermal Exposure

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

Autoignition Temp: N/A

Extinguishing Media

Suitable

Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting

Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)

Emits toxic fumes under fire conditions. Contact with other material may cause fire. May accelerate combustion.

Section 6 - Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill

Evacuate area.

Procedure(s) of Personal Precaution(s)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling

User Exposure

Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

Storage

Suitable

Keep tightly closed. Keep away from combustible materials, heat, sparks, and open flame.

Special Requirements

Hygroscopic.

Section 8 - Exposure Controls / PPE

Engineering Controls

Use only in a chemical fume hood. Safety shower and eye bath.

Personal Protective Equipment

Respiratory

Government approved respirator.

Hand

Compatible chemical-resistant gloves.

Eye

Chemical safety goggles.

General Hygiene Measures

Wash thoroughly after handling. Remove and wash contaminated clothing promptly. Discard contaminated shoes.

Section 9 - Physical/Chemical Properties

Appearance	Color	Form
Physical State	White	Crystalline
Solid		

Molecular Weight: 194.91 AMU

pH	N/A
BP/BP Range	N/A
MP/MP Range	414 °C
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
SG/Density	3.685 g/cm ³
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point °F	N/A
Flash Point °C	N/A
Explosion Limits	N/A

Flammability	N/A
Autoignition Temp	N/A
Solubility	N/A

N/A = not available

Section 10 - Stability and Reactivity**Stability****Stable**

Stable.

Conditions of Instability

Hygroscopic.

Materials to Avoid

Strong reducing agents, Alcohols, Organic materials, Aluminum.

Hazardous Decomposition Products**Hazardous Decomposition Products**

Nitrogen oxides.

Hazardous Polymerization**Hazardous Polymerization**

Will not occur.

Section 11 - Toxicological Information**Route of Exposure****Skin Contact**

Causes skin irritation.

Skin Absorption

May be harmful if absorbed through the skin.

Eye Contact

Causes eye irritation.

Inhalation

May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.

Ingestion

May be harmful if swallowed.

Target Organ(s) or System(s)

Blood. Central nervous system.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: FL0700000

Toxicity Data

Oral - Rat: 2390 mg/kg (LD50)

Intraperitoneal - Rat: 1200 MG/KG (LD50)

Subcutaneous - Rat: 2830 MG/KG (LD50)

Remarks: Behavioral:Convulsions or effect on seizure threshold.
Vascular:BP elevation not characterized in autonomic section.
Kidney, Ureter, Bladder:Proteinuria.

Intravenous - Rat: 1210 MG/KG (LD50)

Remarks: Behavioral:Convulsions or effect on seizure threshold.
Vascular:BP elevation not characterized in autonomic section.
Kidney, Ureter, Bladder:Proteinuria.

Oral - Mouse: 2300 mg/kg (LD50)

Intraperitoneal - Mouse: 1450 MG/KG (LD50)

Remarks: Behavioral:Convulsions or effect on seizure threshold.
Vascular:BP elevation not characterized in autonomic section.
Kidney, Ureter, Bladder:Proteinuria.

Subcutaneous - Mouse: 2200 MG/KG (LD50)

Remarks: Behavioral:Convulsions or effect on seizure threshold.
Vascular:BP elevation not characterized in autonomic section.
Kidney, Ureter, Bladder:Proteinuria.

Intravenous - Mouse: 1300 MG/KG (LD50)

Remarks: Behavioral:Convulsions or effect on seizure threshold.
Vascular:BP elevation not characterized in autonomic section.
Kidney, Ureter, Bladder:Proteinuria.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: Cesium nitrate [or] Caesium nitrate
UN#: 1451
Class: 5.1
Packing Group: Packing Group III
Hazard Label: Oxidizer
PIH: Not PIH

IATA

Proper Shipping Name: Caesium nitrate
IATA UN Number: 1451
Hazard Class: 5.1
Packing Group: III

Section 15 - Regulatory Information

EU Additional Classification

Symbol of Danger: O Xi

Indication of Danger

Oxidizing, Irritant.

Risk Statements R: 8 36/37/38

Contact with combustible material may cause fire. Irritating to eyes, respiratory system and skin.

Safety Statements S: 17

Keep away from combustible material.

US Classification and Label Text

Indication of Danger

Oxidizing, Irritant.

Risk Statements

Contact with combustible material may cause fire. Irritating to eyes, respiratory system and skin.

Safety Statements

Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Keep away from combustible material. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

US Statements

Target organ(s): Blood, Central nervous system.

United States Regulatory Information

SARA Listed: No

TSCA Inventory Item: Yes

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes

NDSL: No

Section 16 - Other Information

Disclaimer

For R&D use only. Not for drug, household or other uses.

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Sigma-Aldrich Corporation
www.sigma-aldrich.com

Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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