

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

CESIUM NITRATE 99.5% AR

CAS-No.: 7789-18-6

Product Code: 00727

Molecular Formula: CsNO₃

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

| | | |
|--------------|---|-------------------------|
| Product form | : | Substance |
| Trade name | : | Cesium Nitrate 99.5% AR |
| EC-No. | : | 232-146-8 |
| CAS-No. | : | 7789-18-6 |

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Company : Chemnovo Synthesis Pvt Ltd.
N-226 Near Kumbhavali Naka
Tarapur MIDC, Boisar-401 506
Palghar, Maharashtra
Telephone : +91 7400096089
Email: export@chemnovo.in

1.4. Emergency telephone number

Emergency number : + 91 7400096089 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

| | |
|---|------|
| Oxidising Solids, Category 2 | H272 |
| Skin corrosion/irritation, Category 2 | H315 |
| Serious eye damage/eye irritation, Category 2 | H319 |
| Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation | H335 |

Full text of H statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

O; R8
Xi; R36
Xi; R37

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Xi; R38

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS03

GHS07

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H272 - May intensify fire; oxidiser.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

Precautionary statements (CLP) :

P220 - Keep/Store away from clothing and other combustible materials.

P261 - Avoid breathing vapours, spray, dust, fume, gas.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : Cesium Nitrate 99.5% AR

CAS-No. : 7789-18-6

EC-No. : 232-146-8

Full text of R- and H-statements: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

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| | | |
|---------------------------------------|---|--|
| First-aid measures after inhalation | : | Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. |
| First-aid measures after skin contact | : | Wash with plenty of water/.... Wash contaminated clothing before reuse. Get medical advice/attention. |
| First-aid measures after eye contact | : | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention. |
| First-aid measures after ingestion | : | Rinse mouth. Do not induce vomiting. |

4.2. Most important symptoms and effects, both acute and delayed

| | | |
|-------------------------------------|---|-----------------------------------|
| Symptoms/effects after inhalation | : | May cause respiratory irritation. |
| Symptoms/effects after skin contact | : | Causes skin irritation. |
| Symptoms/effects after eye contact | : | Causes serious eye irritation. |

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | | |
|--------------------------------|---|--|
| Suitable extinguishing media | : | Carbon dioxide. Dry powder. Foam. Water spray. |
| Unsuitable extinguishing media | : | Do not use a heavy water stream. |

5.2. Special hazards arising from the substance or mixture

| | | |
|------------------|---|---|
| Fire hazard | : | May cause fire or explosion; strong oxidiser. |
| Explosion hazard | : | Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. |

5.3. Advice for firefighter

| | | |
|--------------------------------|---|--|
| Protection during firefighting | : | In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. |
|--------------------------------|---|--|

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | | |
|------------------|---|---|
| General measures | : | No open flames. No smoking. Remove ignition sources. Use special care to avoid static electric charges. |
|------------------|---|---|

6.1.1. For non-emergency personnel

| | | |
|----------------------|---|---------------------------------|
| Emergency procedures | : | Evacuate unnecessary personnel. |
|----------------------|---|---------------------------------|

6.1.2. For emergency responders

| | | |
|----------------------|---|--|
| Protective equipment | : | Use personal protective equipment as required. |
| Emergency procedures | : | Ventilate area. |

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

| | | |
|-------------------------|---|--|
| Methods for cleaning up | : | Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers. |
|-------------------------|---|--|

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6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | | |
|-----------------------------------|---|--|
| Additional hazards when processed | : | Hazardous waste due to potential risk of explosion. |
| Precautions for safe handling | : | Do not breathe vapours. Avoid contact with skin and eyes. Use only outdoors or in a well-ventilated area. Provide good ventilation in process area to prevent formation of vapour. |
| Hygiene measures | : | Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |

7.2. Conditions for safe storage, including any incompatibilities

| | | |
|------------------------|---|---|
| Technical measures | : | Proper grounding procedures to avoid static electricity should be followed. |
| Storage conditions | : | Keep in fireproof place. Keep container tightly closed. |
| Incompatible materials | : | Heat sources. combustible materials. |

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

| | | |
|-------------------------------|---|--|
| Personal protective equipment | : | Wear fire/flame resistant/retardant clothing. |
| Hand protection | : | Protective gloves |
| Eye protection | : | Chemical goggles or safety glasses |
| Skin and body protection | : | Wear suitable 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 | : | Solid |
| Molecular mass | : | 194.91 g/mol |
| Colour | : | White crystalline. |
| Odour | : | No data available |
| Odour threshold | : | No data available |
| pH | : | No data available |
| Relative evaporation rate (butylacetate=1) | : | No data available |
| Melting point | : | 414 °C |
| Freezing point | : | No data available |
| Boiling point | : | No data available |

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| | | |
|----------------------------------|---|---|
| Flash point | : | No data available |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Flammability (solid, gas) | : | No data available |
| Vapour pressure | : | No data available |
| Relative vapour density at 20 °C | : | No data available |
| Relative density | : | No data available |
| Density | : | 3.685 g/cm ³ |
| Solubility | : | Water: Soluble in water |
| Log Pow | : | No data available |
| Viscosity, kinematic | : | No data available |
| Viscosity, dynamic | : | No data available |
| Explosive properties | : | No data available |
| Oxidising properties | : | The substance or mixture is classified as oxidizing with the subcategory 3. May cause fire or explosion; strong oxidiser. |
| Explosive limits | : | 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

May cause fire or explosion; strong oxidiser.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Heat. Sparks. Open flame.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | | |
|-----------------------------------|---|--------------------------------|
| Acute toxicity | : | Not classified |
| Skin corrosion/irritation | : | Causes skin irritation. |
| Serious eye damage/irritation | : | Causes serious eye irritation. |
| Respiratory or skin sensitisation | : | Not classified |
| Germ cell mutagenicity | : | Not classified |
| Carcinogenicity | : | Not classified |

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| | | |
|------------------------|---|-----------------------------------|
| Reproductive toxicity | : | Not classified |
| STOT-single exposure | : | May cause respiratory irritation. |
| STOT-repeated exposure | : | Not classified |
| Aspiration hazard | : | Not classified |

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

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. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | | |
|--|---|---|
| Product/Packaging disposal recommendations | : | Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. |
| Additional information | : | Hazardous waste due to potential risk of explosion. |

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / AND

14.1. UN number

| | | |
|---------------|---|------|
| UN-No. (ADR) | : | 1451 |
| UN-No. (IMDG) | : | 1451 |
| UN-No. (IATA) | : | 1451 |
| UN-No. (ADN) | : | 1451 |
| UN-No. (RID) | : | 1451 |

14.2. UN proper shipping name

| | | |
|-----------------------------|---|-----------------|
| Proper Shipping Name (ADR) | : | CAESIUM NITRATE |
| Proper Shipping Name (IMDG) | : | CAESIUM NITRATE |
| Proper Shipping Name (IATA) | : | CAESIUM NITRATE |
| Proper Shipping Name (ADN) | : | CAESIUM NITRATE |
| Proper Shipping Name (RID) | : | CAESIUM NITRATE |

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| | |
|---|--|
| Transport document description (ADR) : | UN 1451 CAESIUM NITRATE, 5.1, III, (E) |
| Transport document description (IMDG) | UN 1451 CAESIUM NITRATE, 5.1, III |
| Transport document description (IATA) : | UN 1451 CAESIUM NITRATE, 5.1, III |
| Transport document description (ADN) : | UN 1451 CAESIUM NITRATE, 5.1, III |
| Transport document description (RID) : | UN 1451 CAESIUM NITRATE, 5.1, III |

14.3. Transport hazard class(es)

ADR

| | |
|------------------------------------|-----|
| Transport hazard class(es) (ADR) : | 5.1 |
| Danger labels (ADR) : | 5.1 |
| : | |



IMDG

| | |
|-------------------------------------|-----|
| Transport hazard class(es) (IMDG) : | 5.1 |
| Danger labels (IMDG) : | 5.1 |
| : | |



IATA

| | |
|-------------------------------------|-----|
| Transport hazard class(es) (IATA) : | 5.1 |
| Hazard labels (IATA) : | 5.1 |
| : | |



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Transport hazard class(es) (ADN) : 5.1
Danger labels (ADN) : 5.1
:

**RID**

Transport hazard class(es) (RID) : 5.1
Danger labels (RID) : 5.1
:

**14.4. Packing group**

Packing group (ADR) : III
Packing group (IMDG) : III
Packing group (IATA) : III
Packing group (ADN) : III
Packing group (RID) : III

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport
Classification code (ADR) : O2
Limited quantities (ADR) : 5kg
Excepted quantities (ADR) : E1
Packing instructions (ADR) : P002, IBC08, LP02, R001
Special packing provisions (ADR) : B3
Mixed packing provisions (ADR) : Mp10
Portable tank and bulk container instructions (ADR) : T1

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Portable tank and bulk container special

| | | |
|---|---|--------------------|
| provisions (ADR) | : | Tp33 |
| Tank code (ADR) | : | SGAV |
| Tank special provisions (ADR) | : | Tu3 |
| Vehicle for tank carriage | : | AT |
| Transport category (ADR) | : | 3 |
| Special provisions for carriage - Bulk (ADR) | : | VC1, VC2, AP6, Ap7 |
| Special provisions for carriage - Loading, unloading and handling (ADR) | : | Cv24 |
| Hazard identification number (Kemler No.) | : | 50 |
| Orange plates | : | |

50**1451**

| | | |
|--|---|---|
| Tunnel restriction code (ADR) | : | E |
| EAC code | : | 1Z |
| - Transport by sea | : | |
| Limited quantities (IMDG) | : | 5 kg |
| Excepted quantities (IMDG) | : | E1 |
| Packing instructions (IMDG) | : | P002, Lp02 |
| IBC packing instructions (IMDG) | : | IBC08 |
| IBC special provisions (IMDG) | : | B3 |
| Tank instructions (IMDG) | : | T1 |
| Tank special provisions (IMDG) | : | Tp33 |
| EmS-No. (Fire) | : | F-A |
| EmS-No. (Spillage) | : | S-Q |
| Stowage category (IMDG) | : | A |
| Properties and observations (IMDG) | : | White powder. Mixtures with combustible material are readily ignited and may burn fiercely. Harmful if swallowed. |
| MFAG-No | : | 140 |
| - Air transport | : | |
| PCA Excepted quantities (IATA) | : | E1 |
| PCA Limited quantities (IATA) | : | Y546 |
| PCA limited quantity max net quantity (IATA) | : | 10kg |
| PCA packing instructions (IATA) | : | 559 |
| PCA max net quantity (IATA) | : | 25kg |
| CAO packing instructions (IATA) | : | 563 |
| CAO max net quantity (IATA) | : | 100kg |
| Special provisions (IATA) | : | A803 |
| ERG code (IATA) | : | 5L |

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- Inland waterway transport

| | | |
|---------------------------------------|---|--|
| Classification code (ADN) | : | O2 |
| Limited quantities (ADN) | : | 5 kg |
| Excepted quantities (ADN) | : | E1 |
| Carriage permitted (AND) | : | B |
| Equipment required (ADN) | : | PP |
| Provisions prior to loading (ADN) | : | Lo04 |
| Provisions for carriage in bulk (ADN) | : | Co02 |
| Number of blue cones/lights (ADN) | : | 0 |
| Additional requirements/Remarks (ADN) | : | CO02 and LO04 apply only when this substance is carried in bulk or without packaging |

- Rail transport

| | | |
|---|---|-------------------------|
| Classification code (RID) | : | O2 |
| Excepted quantities (RID) | : | E1 |
| Packing instructions (RID) | : | P002, IBC08, LP02, R001 |
| Special packing provisions (RID) | : | B3 |
| Mixed packing provisions (RID) | : | Mp10 |
| Portable tank and bulk container instructions (RID) | : | T1 |
| Portable tank and bulk container special provisions (RID) | : | Tp33 |
| Tank codes for RID tanks (RID) | : | SGAV |
| Special provisions for RID tanks (RID) | : | Tu3 |
| Transport category (RID) | : | 3 |
| Special provisions for carriage – Bulk (RID) | : | VC1, VC2, AP6, Ap7 |
| Special provisions for carriage – Loading, unloading and handling (RID) | : | Cw24 |
| Colis express (express parcels) (RID) | : | Ce11 |
| Hazard identification number (RID) | : | 50 |

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. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Cesium Nitrate 99.5% AR is not on the REACH Candidate List

Cesium Nitrate 99.5% AR is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

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| | |
|---|---|
| Reference to AwSV : | Water hazard class (WGK) 1, low hazard to water (Classification according to AwSV; ID No. 9270) |
| 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : | Is not subject of the 12. BImSchV (Hazardous Incident Ordinance) |
| Netherlands | |
| SZW-lijst van kankerverwekkende stoffen | The substance is not listed |
| SZW-lijst van mutagene stoffen : | The substance is not listed |
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : | The substance is not listed |
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : | The substance is not listed |
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : | The substance is not listed |
| Denmark | |
| Recommendations Danish Regulation : | Young people below the age of 18 years are not allowed to use the product |

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

| | |
|---------------|--|
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Ox. Sol. 2 | Oxidising Solids, Category 2 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT SE 3 | Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation |
| H272 | May intensify fire; oxidiser. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| R36 | Irritating to eyes |
| R37 | Irritating to respiratory system |
| R38 | Irritating to skin |
| R8 | Contact with combustible material may cause fire |
| O | Oxidising |
| Xi | Irritant |

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Further information

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. Chemnovo Synthesis Pvt Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.chemnovo.in for additional terms and conditions of sale.

Version: 2.0
Revision Date: 07 February 2026