



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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Cerium(III) ammonium nitrate tetrahydrate: sc-300333



The Power to Question

MATERIAL SAFETY DATA SHEET

1 Identification of substance:

Product Name: Cerium(III) ammonium nitrate tetrahydrate

Catalog Number: sc-300333

Supplier: Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, California 95060
800.457.3801 or 831.457.3800

Emergency: ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255
(1-800-CHEMCALL) or call +613 9573 3112

2 Hazards identification

Classification of the substance or mixture



GHS07

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant

R36/38: Irritating to eyes and skin.



O; Oxidizing

R8: Contact with combustible material may cause fire.

Label elements

Labelling according to EU guidelines:

Code letter and hazard designation of product:

Xi Irritant

O Oxidizing

Risk phrases:

8 Contact with combustible material may cause fire.

36/38 Irritating to eyes and skin.

Safety phrases:

17 Keep away from combustible material.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Hazard description:

WHMIS classification



Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

| | |
|------------|---|
| HEALTH | 1 |
| FIRE | 0 |
| REACTIVITY | 2 |

Health (acute effects) = 1

Flammability = 0

Reactivity = 2

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances

(CAS#) Description:

Cerium (III) ammonium nitrate, tetrahydrate (CAS# 13083-04-0), 100%

4 First aid measures

Description of first aid measures

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm.

Seek immediate medical advice.

After skin contact

Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

After eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing Seek immediate medical advice.

5 Firefighting measures

Extinguishing media

Suitable extinguishing agents

Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture

This substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition.

In case of fire, the following can be released:

Nitrogen oxides (NOx)

Advice for firefighters

Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Environmental precautions:

Do not allow material to be released to the environment without proper governmental permits.

Methods and material for containment and cleaning up: Pick up mechanically.

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling

Precautions for safe handling

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

Information about protection against explosions and fires:

Substance/product can reduce the ignition temperature of flammable substances.

This substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition.

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility:

Store away from flammable substances.

Store away from reducing agents.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

8 Exposure controls/personal protection

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace:

Additional information: No data

Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Breathing equipment: Use suitable respirator when high concentrations are present.

Protection of hands: Impervious gloves

Eye protection: Safety glasses

Body protection: Protective work clothing.

9 Physical and chemical properties

| | |
|-------------------------------------------------------------------|---------------------------------------------------|
| Information on basic physical and chemical properties | |
| General Information | |
| Appearance: | |
| Form: | Crystalline |
| Color: | Yellow Orange |
| Odor: | Mild |
| Odour threshold: | Not determined. |
| pH-value: | Not applicable. |
| Change in condition | |
| Melting point/Melting range: | Not determined |
| Boiling point/Boiling range: | Not determined |
| Sublimation temperature / start: | Not determined |
| Flash point: | Not applicable |
| Flammability (solid, gaseous) | Contact with combustible material may cause fire. |
| Ignition temperature: | Not determined |
| Decomposition temperature: | Not determined |
| Auto igniting: | Not determined. |
| Explosion limits: | |
| Lower: | Not determined |
| Upper: | Not determined |
| Vapor pressure: | Not applicable. |
| Density: | Not determined |
| Relative density | Not determined. |
| Vapour density | Not applicable. |
| Evaporation rate | Not applicable. |
| Solubility in / Miscibility with | |
| Water: | Soluble |
| Segregation coefficient (n-octanol/water): Not determined. | |
| Viscosity: | |
| dynamic: | Not applicable. |
| kinematic: | Not applicable. |
| Molecular Formula: | $CeH_8N_7O_{19} \cdot 4H_2O$ |
| Molecular Weight: | 558.28 |

10 Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions

Reacts with reducing agents

Reacts with flammable substances

Incompatible materials:

Reducing agents, easily oxidized materials

Organic materials

Hazardous decomposition products: Nitrogen oxides (NOx)

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: Irritant to skin and mucous membranes.

on the eye: Irritating effect.

Sensitization: No sensitizing effects known.

Subacute to chronic toxicity:

Cerium salts increase the blood coagulation rate. Exposure to cerium salts may increase sensitivity to heat, itching and skin lesions. Large doses to experimental animals have caused writhing, ataxia, labored respiration, sedation, hypotension and death by cardiovascular collapse.

Small doses of nitrates may cause weakness, general depression, headache and mental impairment. Larger doses may cause dizziness, abdominal cramps, vomiting, bloody diarrhea, convulsions and collapse.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information

Toxicity

Acquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Do not allow material to be released to the environment without proper governmental permits.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

DOT regulations:



Hazard class: 5.1
Identification number: UN1477
Packing group: III
Proper shipping name (technical name): NITRATES, INORGANIC, N.O.S. (Cerium (III) ammonium nitrate)
Label: 5.1

Land transport ADR/RID (cross-border)



ADR/RID class: 5.1 (O2) Oxidizing substances
Danger code (Kemler): 50
UN-Number: 1477
Packaging group: III
UN proper shipping name: 1477 NITRATES, INORGANIC, N.O.S. (Cerium (III) ammonium nitrate)

Maritime transport IMDG:



IMDG Class: 5.1
UN Number: 1477
Label: 5.1
Packaging group: III
Marine pollutant: NO
Proper shipping name: NITRATES, INORGANIC, N.O.S. (Cerium (III) ammonium nitrate)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 5.1
UN/ID Number: 1477
Label: 5.1
Packaging group: III
Proper shipping name: NITRATES, INORGANIC, N.O.S. (Cerium (III) ammonium nitrate)

UN "Model Regulation": UN1477, NITRATES, INORGANIC, N.O.S., 5.1, III

Special precautions for user Warning: Oxidizing substances

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15 Regulatory information

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

Product related hazard informations:

Hazard symbols:

Xi Irritant
O Oxidizing

Risk phrases:

8 Contact with combustible material may cause fire.
36/38 Irritating to eyes and skin.

Safety phrases:

17 Keep away from combustible material.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

Information about limitation of use: For use only by technically qualified individuals.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information:

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

06/22/2011