

1 Identification

- **Product identifier**
- **Product Name:** Lead(II) Nitrate
- **Part Name:**
IFC-PB-1A-25
IFC-PB-1A-50
- **CAS Number:**
10099-74-8
- **EC number:**
233-245-9
- **Index number:**
082-001-00-6
- **Application of the substance / the mixture** For Laboratory Use Only
- **Uses advised against** Not for Human or Animal Use
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Spex CertiPrep, LLC.
203 Norcross Ave, Metuchen,
NJ 08840 USA
732-549-7144
USMet-CRMSales@antylia.com
- **Information department:** product safety department
- **Emergency telephone number:**
Emergency Phone Number (24 hours)
CHEMTREC (800-424-9300)
Outside US: 703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carcinogenicity 1B H350 May cause cancer.
 Toxic to Reproduction 1A H360 May damage fertility or the unborn child.
 Specific Target Organ Toxicity - Repeated Exposure 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Acute Toxicity - Oral 4 H302 Harmful if swallowed.
 Acute Toxicity - Inhalation 4 H332 Harmful if inhaled.

- **Label elements**
- **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**
lead dinitrate
- **Hazard statements**
H302+H332 Harmful if swallowed or if inhaled.
H350 May cause cancer.
H360 May damage fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
- **Precautionary statements**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.

Product Name: Lead(II) Nitrate

(Contd. of page 1)

- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
- P330 Rinse mouth.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P314 Get medical advice/attention if you feel unwell.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



The substance possesses oxidizing properties.

- **HMIS-ratings (scale 0 - 4)**



- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**
10099-74-8 lead dinitrate
- **Identification number(s)**
- **EC number:** 233-245-9
- **Index number:** 082-001-00-6

4 First-aid measures

- **Description of first aid measures**
- **General information:** Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:**
Immediately call a doctor.
Do not give anything to eat or drink - Do not induce vomiting
- **Information for Doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Mount respiratory protective device.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to section 13.

(Contd. on page 3)
— US —

Product Name: Lead(II) Nitrate

(Contd. of page 2)

Ensure adequate ventilation.

· **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.

· **Protective Action Criteria for Chemicals**

| | |
|-----------------|-------------------------|
| · PAC-1: | 0.24 mg/m ³ |
| · PAC-2: | 180 mg/m ³ |
| · PAC-3: | 1,100 mg/m ³ |

7 Handling and storage

· **Handling:**

· **Precautions for safe handling**

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

· **Information about protection against explosions and fires:** Keep respiratory protective device available.

· **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:** Not required.

· **Further information about storage conditions:** Keep receptacle tightly sealed.

· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see section 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

10099-74-8 lead dinitrate

PEL Long-term value: 0.05 mg/m³
as Pb; See 29 CFR 1910.1025

REL Long-term value: 0.05* mg/m³
as Pb;*8-hr TWA; See Pocket Guide App. C

TLV Long-term value: 0.05 mg/m³
as Pb; A3, BEI

· **Ingredients with biological limit values:**

10099-74-8 lead dinitrate

BEI 200 µg/100 ml
Medium: blood
Time: not critical
Parameter: Lead

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

(Contd. on page 4)

Product Name: Lead(II) Nitrate

(Contd. of page 3)

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

| | |
|-------------------------|-----------------|
| Form: | Solid |
| Color: | Not determined. |
| Odor: | Characteristic |
| Odour Threshold: | Not applicable. |

pH-value: Not applicable.

Change in condition

| | |
|-------------------------------------|-----------------|
| Melting point/Melting range: | 470 °C (878 °F) |
| Boiling point/Boiling range: | Undetermined. |

Flash point: Not applicable.

Flammability (solid, gaseous): Product is not flammable.

Decomposition temperature: Not applicable.

Ignition temperature: Not determined.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

| | |
|---------------|-----------------|
| Lower: | Not applicable. |
| Upper: | Not applicable. |

Vapor pressure: Not applicable.

Density at 20 °C (68 °F) 4.535 g/cm³ (37.84458 lbs/gal)

| | |
|-------------------------|-------------------------|
| Bulk density: | 1,850 kg/m ³ |
| Relative density | Not applicable. |
| Vapor density | Not applicable. |
| Evaporation rate | Not applicable. |

Solubility in / Miscibility with Water at 20 °C (68 °F): 525 g/l

Partition coefficient (n-octanol/water): Not applicable.

Viscosity:

| | |
|---------------------|-----------------|
| Dynamic: | Not applicable. |
| Kinematic: | Not applicable. |
| VOC content: | 0.00 % |

Solids content: 100.0 %

Other information No further relevant information available.

10 Stability and reactivity

Reactivity No further relevant information available.

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

(Contd. on page 5)

Printing date 08/23/2023

Reviewed on 08/23/2023

Product Name: Lead(II) Nitrate

(Contd. of page 4)

· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
Product is suspected to cause damage to fertility.
Product is suspected to cause birth defects.
- **Carcinogenic categories**

| | |
|--|----|
| · IARC (International Agency for Research on Cancer) | 2A |
| · NTP (National Toxicology Program) | R |
| · OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed. | |


12 Ecological information

- **Toxicity**
- **Aquatic 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:**
Water hazard class 3 (Assessment by list): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
- **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:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

| | |
|---|--|
| · UN-Number · DOT, ADR, IMDG, IATA | UN1469 |
| · UN proper shipping name · DOT · ADR · IMDG, IATA | Lead nitrate 1469 LEAD NITRATE, ENVIRONMENTALLY HAZARDOUS LEAD NITRATE |
| · Transport hazard class(es) · DOT | |
|  | |
| · Class | 5.1 Oxidizing substances |

(Contd. on page 6)

Product Name: Lead(II) Nitrate

(Contd. of page 5)

| | |
|---|---|
| · Label | 5.1, 6.1 |
| · ADR | |
| | |
| · Class | 5.1 Oxidizing substances |
| · Label | 5.1+6.1 |
| · IMDG | |
| | |
| · Class | 5.1 Oxidizing substances |
| · Label | 5.1/6.1 |
| · IATA | |
| | |
| · Class | 5.1 Oxidizing substances |
| · Label | 5.1 (6.1) |
| · Packing group | II |
| · DOT, ADR, IMDG, IATA | II |
| · Environmental hazards: | |
| · Special marking (ADR): | Symbol (fish and tree) |
| · Special precautions for user | Warning: Oxidizing substances |
| · Hazard identification number (Kemler code): | 56 |
| · EMS Number: | F-A,S-Q |
| · Segregation groups | (SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds |
| · Stowage Category | A |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | |
| · ADR | |
| · Excepted quantities (EQ) | Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g |
| · IMDG | |
| · Limited quantities (LQ) | 1 kg |
| · Excepted quantities (EQ) | Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g |
| · UN "Model Regulation": | UN 1469 LEAD NITRATE, 5.1 (6.1), II, ENVIRONMENTALLY HAZARDOUS |

15 Regulatory information

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

· Sara

· Section 313 (Specific toxic chemical listings):

Substance is listed.

· TSCA (Toxic Substances Control Act):

ACTIVE

· Hazardous Air Pollutants

Substance is listed.

(Contd. on page 7)

Product Name: Lead(II) Nitrate

(Contd. of page 6)

· Proposition 65

· Chemicals known to cause cancer:

Substance is listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

B2

· TLV (Threshold Limit Value)

A3

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

· GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS07

GHS08

· Signal word Danger

· Hazard-determining components of labeling:

lead dinitrate

· Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

H350 May cause cancer.

H360 May damage fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

P201 Obtain special instructions before use.

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

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

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

P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P330 Rinse mouth.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

P314 Get medical advice/attention if you feel unwell.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· National regulations:

· Information about limitation of use:

Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.

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

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: product safety department

· Contact:

Spex CertiPrep, LLC.

1-732-549-7144

· Date of preparation / last revision 08/23/2023

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

(Contd. on page 8)

Printing date 08/23/2023

Reviewed on 08/23/2023

Product Name: Lead(II) Nitrate

(Contd. of page 7)

IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEL: Biological Exposure Limit
Acute Toxicity - Oral 4: Acute toxicity – Category 4
Carcinogenicity 1B: Carcinogenicity – Category 1B
Toxic to Reproduction 1A: Reproductive toxicity – Category 1A
Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) – Category 2

— US —