

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/30/2021

Reviewed on 12/30/2021

1 Identification

- **Product identifier**
- **Trade name:** Lead Citrate, Trihydrate
- **Article number:** 17800, 17810
- **CAS Number:**
512-26-5
- **EC number:**
208-141-1
- **Index number:**
082-001-00-6
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carc. 1B H350 May cause cancer.

Repr. 1A H360 May damage fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 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 statements**
Harmful if swallowed or if inhaled.

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May cause cancer.

May damage fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

Obtain special instructions before use.

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

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

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

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

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

Rinse mouth.

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

IF exposed or concerned: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Store locked up.

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

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 3

Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *2

Fire = 0

Reactivity = 0

· 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

512-26-5 Lead Citrate, Trihydrate

· Identification number(s)

· EC number: 208-141-1

· 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.

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- 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.
- **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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
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 item 13.
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:** Substance is not listed.
- **PAC-2:** Substance is not listed.
- **PAC-3:** Substance is not listed.

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.*

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8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **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.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Store protective clothing separately.
- **Breathing equipment:**
 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:**
 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.
 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.
- **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:** Not required.

9 Physical and chemical properties

- | | |
|--|---|
| · Information on basic physical and chemical properties | |
| · General Information | |
| · Appearance: | |
| Form: | Solid |
| Color: | Not determined. |
| · Odor: | Characteristic |
| · Odor threshold: | Not determined. |
| · pH-value: | Not applicable. |
| · Change in condition | |
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | Undetermined. |
| · Flash point: | Not applicable. |
| · Flammability (solid, gaseous): | Product is not flammable. |
| · Decomposition temperature: | Not determined. |
| · Auto igniting: | Not determined. |
| · Danger of explosion: | Product does not present an explosion hazard. |

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· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not applicable.
· Density:	Not determined.
· Relative density	Not determined.
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water:	Not determined.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· 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.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)** Substance is not listed.
- **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.

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- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
 Water hazard class 3 (Self-assessment): 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.
 Also poisonous for fish and plankton in water bodies.
 Very toxic for aquatic organisms
- **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.

14 Transport information

- | | |
|--|--|
| <ul style="list-style-type: none"> · UN-Number · DOT, ADR, IMDG, IATA | <p>UN2291</p> |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT · ADR · IMDG · IATA | <p>Lead compounds, soluble, n.o.s. (Lead Citrate, Trihydrate)
 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS
 LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT
 LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate)</p> |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT | <p>6.1 Toxic substances</p> |
| <ul style="list-style-type: none"> · Class | <p>6.1 Toxic substances</p> |



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· **Label** 6.1

· **ADR, IMDG**



· **Class** 6.1 Toxic substances
 · **Label** 6.1

· **IATA**



· **Class** 6.1 Toxic substances
 · **Label** 6.1

· **Packing group**
 · **DOT, ADR, IMDG, IATA** III

· **Environmental hazards:** Environmentally hazardous substance, solid; Marine Pollutant
 · **Marine pollutant:** Yes (DOT)
 Symbol (fish and tree)
 · **Special marking (ADR):** Symbol (fish and tree)

· **Special precautions for user** Warning: Toxic substances
 · **Hazard identification number (Kemler code):** 60
 · **EMS Number:** 6.1-04
 · **Segregation groups** Heavy metals and their salts (including their organometallic compounds), 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:**

· **DOT**
 · **Quantity limitations** On passenger aircraft/rail: 100 kg
 On cargo aircraft only: 200 kg
 · **Remarks:** Special marking with the symbol (fish and tree).

· **ADR**
 · **Excepted quantities (EQ)** Code: E1
 Maximum net quantity per inner packaging: 30 g
 Maximum net quantity per outer packaging: 1000 g

· **IMDG**
 · **Limited quantities (LQ)** 5 kg
 · **Excepted quantities (EQ)** Code: E1
 Maximum net quantity per inner packaging: 30 g
 Maximum net quantity per outer packaging: 1000 g

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· UN "Model Regulation":	UN 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (LEAD CITRATE, TRIHYDRATE), 6.1, III, ENVIRONMENTALLY HAZARDOUS
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15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Sara**
- **Section 355 (extremely hazardous substances):** Substance is not listed.
- **Section 313 (Specific toxic chemical listings):** Substance is listed.
- **TSCA (Toxic Substances Control Act):** ACTIVE
- **Hazardous Air Pollutants** Substance is listed.
- **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)** Substance is not listed.
- **TLV (Threshold Limit Value)** Substance is not listed.
- **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 statements**
Harmful if swallowed or if inhaled.
May cause cancer.
May damage fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.
- **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Call a poison center/doctor if you feel unwell.
Rinse mouth.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned: Get medical advice/attention.
Get medical advice/attention if you feel unwell.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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· **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.

· **Contact:**

· **Date of preparation / last revision** 12/30/2021 / -

· **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

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)

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

Acute Tox. 4: Acute toxicity – Category 4

Carc. 1B: Carcinogenicity – Category 1B

Repr. 1A: Reproductive toxicity – Category 1A

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

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according to WHS Regulations

Printing date 30.12.2021

Revision: 30.12.2021

1 Identification

· **Product identifier**

· **Trade name:** Lead Citrate, Trihydrate

· **Article number:** 17800, 17810

· **CAS Number:**

512-26-5

· **EC number:**

208-141-1

· **Index number:**

082-001-00-6

· **Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

· **Application of the substance / the mixture** Laboratory chemicals

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: info@emsdiasum.com

www.emsdiasum.com

ProSciTech Pty Ltd

11 Carlton Street, Kirwan QLD 4817 Australia

Telephone Number: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)

Emergency Contact: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)

Website: ems.proscitech.com

Emgrid Australia Pty. Ltd.

P.O. Box 118

The Patch VIC 3792

Australia

Tel: 03 9752 1785

Fax: 03 9752 1784

Website: www.emgrid.com.au

· **Further information obtainable from:** Product safety department

· **Emergency telephone number:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

2 Hazard(s) Identification

· **Classification of the substance or mixture**



GHS08 health hazard

Carc. 1B H350 May cause cancer.

Repr. 1A H360 May damage fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

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Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

· **Label elements**

· **GHS label elements**

The substance is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS07 GHS08

· **Signal word** *Danger*

· **Hazard statements**

Harmful if swallowed.

Harmful if inhaled.

May cause cancer.

May damage fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

Obtain special instructions before use.

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

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

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

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Rinse mouth.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Store locked up.

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

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition and Information on Ingredients

· **Chemical characterisation: Substances**

· **CAS No. Description**

512-26-5 Lead Citrate, Trihydrate

· **Identification number(s)**

· **EC number:** 208-141-1

· **Index number:** 082-001-00-6

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Trade name: Lead Citrate, Trihydrate

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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:** Call for a doctor immediately.
- **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 extinguishing methods suitable to surrounding conditions.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
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 item 13.
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.

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 fire - and explosion protection:** 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.

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- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls and personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
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 self-contained respiratory protective device.
- **Protection of hands:**
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.
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.
- **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:** Not required.

9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Solid
Colour:	Not determined.
Odour:	Characteristic
Odour threshold:	Not determined.
- **pH-value:** Not applicable.
- **Change in condition**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.
- **Flash point:** Not applicable.
- **Flammability (solid, gas):** Product is not flammable.

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Trade name: *Lead Citrate, Trihydrate*

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· Decomposition temperature:	<i>Not determined.</i>
· Auto-ignition temperature:	<i>Not determined.</i>
· Explosive properties:	<i>Product does not present an explosion hazard.</i>
· Explosion limits:	
Lower:	<i>Not determined.</i>
Upper:	<i>Not determined.</i>
· Vapour pressure:	<i>Not applicable.</i>
· Density:	<i>Not determined.</i>
· Relative density	<i>Not determined.</i>
· Vapour density	<i>Not applicable.</i>
· Evaporation rate	<i>Not applicable.</i>
· Solubility in / Miscibility with water:	<i>Not determined.</i>
· Partition coefficient: n-octanol/water:	<i>Not determined.</i>
· Viscosity:	
Dynamic:	<i>Not applicable.</i>
Kinematic:	<i>Not applicable.</i>
· Other information	<i>No further relevant information available.</i>

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

11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** *No irritant effect.*
- **Serious eye damage/irritation** *No irritating effect.*
- **Respiratory or skin sensitisation** *No sensitising effects known.*
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
Carc. 1B, Repr. 1A

12 Ecological Information

- **Toxicity**
- **Aquatic toxicity:** *No further relevant information available.*

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- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
*Water hazard class 3 (German Regulation) (Self-assessment): 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.
 Also poisonous for fish and plankton in water bodies.
 Very toxic for aquatic organisms*
- **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 together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---|---|
| UN-Number | UN2291 |
| ADG, IMDG, IATA | |
| UN proper shipping name | 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS |
| ADG | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT |
| IMDG | |
| IATA | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate) |
| Transport hazard class(es) | |
| ADG, IMDG | |
|  | |
| Class | 6.1 Toxic substances. |

(Contd. on page 7)

AU

Safety Data Sheet


according to WHS Regulations

Printing date 30.12.2021

Revision: 30.12.2021

Trade name: Lead Citrate, Trihydrate

(Contd. of page 6)

· Label	6.1
· IATA	
	
· Class	6.1 Toxic substances.
· Label	6.1
· Packing group	III
· ADG, IMDG, IATA	III
· Environmental hazards:	Environmentally hazardous substance, solid; Marine Pollutant
· Marine pollutant:	Yes (DOT) Symbol (fish and tree)
· Special marking (ADG):	Symbol (fish and tree)
· Special precautions for user	Warning: Toxic substances.
· Hazard identification number (Kemler code):	60
· EMS Number:	6.1-04
· Segregation groups	Heavy metals and their salts (including their organometallic compounds), lead and its compounds
· Stowage Category	A
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADG	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· Transport category	2
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN "Model Regulation":	UN 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (LEAD CITRATE, TRIHYDRATE), 6.1, III, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Australian Inventory of Industrial Chemicals Substance is listed.
- Standard for the Uniform Scheduling of Medicines and Poisons Substance is not listed.
- Australia: Priority Existing Chemicals Substance is not listed.

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Safety Data Sheet

according to WHS Regulations

Printing date 30.12.2021

Revision: 30.12.2021

Trade name: Lead Citrate, Trihydrate

(Contd. of page 7)

· **GHS label elements**

The substance is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS07 GHS08

· **Signal word** *Danger*

· **Hazard statements**

Harmful if swallowed.

Harmful if inhaled.

May cause cancer.

May damage fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

Obtain special instructions before use.

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

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

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

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Rinse mouth.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Store locked up.

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

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** *Substance is not listed.*

· **Seveso category E1** *Hazardous to the Aquatic Environment*

· **Qualifying quantity (tonnes) for the application of lower-tier requirements** *100 t*

· **Qualifying quantity (tonnes) for the application of upper-tier requirements** *200 t*

· **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.

· **Contact:**

· **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

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Carc. 1B: Carcinogenicity – Category 1B

Repr. 1A: Reproductive toxicity – Category 1A

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Safety Data Sheet

according to HPR, Schedule 1

Printing date 12/30/2021

Reviewed on 12/30/2021

1 Identification

- **Product identifier**
- **Trade name:** Lead Citrate, Trihydrate
- **Article number:** 17800, 17810
- **CAS Number:**
512-26-5
- **EC number:**
208-141-1
- **Index number:**
082-001-00-6
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Hazard identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carcinogenicity - Category 1B

H350 May cause cancer.

Reproductive Toxicity - Category 1A

H360 May damage fertility or the unborn child.

Specific Target Organ Toxicity - Repeated Exposure - Category 2

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



GHS07

Acute Toxicity (Oral) - Category 4

H302 Harmful if swallowed.

Acute Toxicity (Inhalation) - Category 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

(Contd. on page 2)

CA

Safety Data Sheet

according to HPR, Schedule 1

Printing date 12/30/2021

Reviewed on 12/30/2021

Trade name: Lead Citrate, Trihydrate

(Contd. of page 1)

- **Hazard statements**

Harmful if swallowed or if inhaled.

May cause cancer.

May damage fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure.

- **Precautionary statements**

Obtain special instructions before use.

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

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

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

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

Rinse mouth.

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

IF exposed or concerned: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Store locked up.

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

- **Classification system:**

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



Health = 3

Fire = 0

Reactivity = 0

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



Health = *2

Fire = 0

Reactivity = 0

3 Composition/Information on ingredients

- **Chemical characterization: Substances**

- **CAS No. Description**

512-26-5 Lead Citrate, Trihydrate

- **Identification number(s)**

· **EC number:** 208-141-1

· **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.

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 12/30/2021

Reviewed on 12/30/2021

Trade name: Lead Citrate, Trihydrate

(Contd. of page 2)

- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Immediately call a doctor.
- **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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
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 item 13.
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.

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 item 7.

(Contd. on page 4)

CA

Safety Data Sheet

according to HPR, Schedule 1

Printing date 12/30/2021

Reviewed on 12/30/2021

Trade name: Lead Citrate, Trihydrate

(Contd. of page 3)

- **Control parameters**

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

512-26-5 Lead Citrate, Trihydrate

EV	TWA: 0.05 mg/m ³ as Pb, Skin (organic compounds)
----	--

- **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.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

- **Breathing equipment:**

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:**

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.

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.

- **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:** Not required.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Solid
Color:	Not determined.

- **Odor:** Characteristic

- **Odor threshold:** Not determined.

- **pH-value:** Not applicable.

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

- **Flash point:** Not applicable.

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

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Not determined.

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Safety Data Sheet

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Printing date 12/30/2021

Reviewed on 12/30/2021

Trade name: **Lead Citrate, Trihydrate**

(Contd. of page 4)

· Danger of explosion:	<i>Product does not present an explosion hazard.</i>
· Explosion limits:	
Lower:	<i>Not determined.</i>
Upper:	<i>Not determined.</i>
· Vapor pressure:	<i>Not applicable.</i>
· Density:	<i>Not determined.</i>
· Relative density	<i>Not determined.</i>
· Vapor density	<i>Not applicable.</i>
· Evaporation rate	<i>Not applicable.</i>
· Solubility in / Miscibility with Water:	<i>Not determined.</i>
· Partition coefficient (n-octanol/water):	<i>Not determined.</i>
· Viscosity:	
Dynamic:	<i>Not applicable.</i>
Kinematic:	<i>Not applicable.</i>
· Other information	<i>No further relevant information available.</i>

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

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** *No irritant effect.*
- **on the eye:** *No irritating effect.*
- **Sensitization:** *No sensitizing effects known.*
- **Additional toxicological information:**
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)** *Substance is not listed.*
- **NTP (National Toxicology Program)** *R*

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** *No further relevant information available.*
- **Persistence and degradability** *No further relevant information available.*

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CA

Safety Data Sheet

according to HPR, Schedule 1

Printing date 12/30/2021

Reviewed on 12/30/2021

Trade name: **Lead Citrate, Trihydrate**


(Contd. of page 5)

- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
*Water hazard class 3 (Self-assessment): 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.
 Also poisonous for fish and plankton in water bodies.
 Very toxic for aquatic organisms*
- **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.

14 Transport information

- | | |
|---|---|
| UN-Number | UN2291 |
| DOT/TDG, ADR, IMDG, IATA | UN2291 |
| UN proper shipping name | Lead compounds, soluble, n.o.s. (Lead Citrate, Trihydrate) |
| DOT/TDG | 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS |
| ADR | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT |
| IMDG | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT |
| IATA | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate) |
| Transport hazard class(es) | |
| DOT/TDG (Transport dangerous goods): | |
|  | |
| Class | 6.1 Toxic substances |

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CA

Safety Data Sheet

according to HPR, Schedule 1

Printing date 12/30/2021

Reviewed on 12/30/2021

Trade name: Lead Citrate, Trihydrate

(Contd. of page 6)

· **Label** 6.1· **ADR, IMDG**· **Class** 6.1 Toxic substances· **Label** 6.1· **IATA**· **Class** 6.1 Toxic substances· **Label** 6.1· **Packing group**
· **DOT/TDG, ADR, IMDG, IATA** III· **Environmental hazards:** Environmentally hazardous substance, solid; Marine Pollutant· **Marine pollutant:** Yes (DOT)
Symbol (fish and tree)· **Special marking (ADR):** Symbol (fish and tree)· **Special precautions for user** Warning: Toxic substances· **Hazard identification number (Kemler code):** 60· **EMS Number:** 6.1-04· **Segregation groups** Heavy metals and their salts (including their organometallic compounds), 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:**· **DOT/TDG**· **Quantity limitations** On passenger aircraft/rail: 100 kg

On cargo aircraft only: 200 kg

· **Remarks:** Special marking with the symbol (fish and tree).· **ADR**· **Excepted quantities (EQ)** Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

· **IMDG**· **Limited quantities (LQ)** 5 kg· **Excepted quantities (EQ)** Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 12/30/2021

Reviewed on 12/30/2021

Trade name: Lead Citrate, Trihydrate

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· **UN "Model Regulation":** UN 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (LEAD CITRATE, TRIHYDRATE), 6.1, III, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Sara**
- **Section 355 (extremely hazardous substances):** Substance is not listed.
- **Section 313 (Specific toxic chemical listings):** Substance is listed.
- **TSCA (Toxic Substances Control Act):** ACTIVE
- **Canadian substance listings:**
- **Canadian Domestic Substances List (DSL)** Substance is listed.
- **Canadian Non-Domestic Substances List (NDSL)** Substance is not listed.
- **Canadian Ingredient Disclosure list (limit 0.1%)** Substance is not listed.
- **Canadian Ingredient Disclosure list (limit 1%)** 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 statements**
Harmful if swallowed or if inhaled.
May cause cancer.
May damage fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.
- **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Call a poison center/doctor if you feel unwell.
Rinse mouth.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned: Get medical advice/attention.
Get medical advice/attention if you feel unwell.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

CA

(Contd. on page 9)

Safety Data Sheet
according to HPR, Schedule 1

Printing date 12/30/2021

Reviewed on 12/30/2021

Trade name: Lead Citrate, Trihydrate

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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.

- **Contact:**
- **Date of the latest revision of the safety data sheet 12/30/2021 / -**
- **Abbreviations and acronyms:**
 - IMDG: International Maritime Code for Dangerous Goods*
 - DOT: US Department of Transportation*
 - 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)*
 - PBT: Persistent, Bioaccumulative and Toxic*
 - vPvB: very Persistent and very Bioaccumulative*

CA

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 30.12.2021

Revision: 30.12.2021

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

- **Product identifier**
- **Trade name:** Lead Citrate, Trihydrate
- **Article number:** 17800, 17810
- **CAS Number:**
512-26-5
- **EC number:**
208-141-1
- **Index number:**
082-001-00-6
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Hazards identification

- **Classification of the substance or mixture**



health hazard

Repr. 1A H360 May damage fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

- **Label elements**
- **GHS label elements**

The substance is classified and labelled according to the Globally Harmonised System (GHS).

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.12.2021

Revision: 30.12.2021

Trade name: **Lead Citrate, Trihydrate**

(Contd. of page 1)

· **Hazard pictograms**

GHS07 GHS08 GHS09

· **Signal word** *Danger*· **Hazard statements***Harmful if swallowed or if inhaled.**May damage fertility or the unborn child.**May cause damage to organs through prolonged or repeated exposure.**Very toxic to aquatic life with long lasting effects.*· **Precautionary statements***Do not breathe dust/fume/gas/mist/vapours/spray.**Wear protective gloves/protective clothing/eye protection/face protection.**IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.**IF INHALED: Remove person to fresh air and keep comfortable for breathing.**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.*· **Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterisation: Substances**· **CAS No. Description***512-26-5 Lead Citrate, Trihydrate*· **Identification number(s)**· **EC number:** 208-141-1· **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:** *Call for a doctor immediately.*· **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.*

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.12.2021

Revision: 30.12.2021

Trade name: Lead Citrate, Trihydrate

(Contd. of page 2)

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
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 item 13.
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.

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 fire - and explosion protection:** 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 container tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 30.12.2021

Revision: 30.12.2021

Trade name: **Lead Citrate, Trihydrate**

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- **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

- **Protection of hands:**

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.

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.

- **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:** Not required.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Solid
Colour:	Not determined.
Odour:	Characteristic
Odour threshold:	Not determined.

- **pH-value:** Not applicable.

- **Change in condition**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.

- **Flash point:** Not applicable.

- **Flammability (solid, gas):** Product is not flammable.

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Not determined.

- **Explosive properties:** Product does not present an explosion hazard.

- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

- **Vapour pressure:** Not applicable.

Density:	Not determined.
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.

- **Solubility in / Miscibility with water:** Not determined.

- **Partition coefficient: n-octanol/water:** Not determined.

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Trade name: **Lead Citrate, Trihydrate**

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- | | |
|----------------------------|--|
| · Viscosity: | |
| Dynamic: | Not applicable. |
| Kinematic: | Not applicable. |
| · 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.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** No irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
Repr. 1A

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 3 (German Regulation) (Self-assessment): 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.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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· **Other adverse effects** No further relevant information available.**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number · ADR, IMDG, IATA	UN2291
· UN proper shipping name · ADR · IMDG · IATA	2291 LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate)
· Transport hazard class(es) · ADR, IMDG	
 	
· Class · Label	6.1 Toxic substances. 6.1
· IATA	
	
· Class · Label	6.1 Toxic substances. 6.1
· Packing group · ADR, IMDG, IATA	III
· Environmental hazards: · Marine pollutant: · Special marking (ADR):	Environmentally hazardous substance, solid; Marine Pollutant Symbol (fish and tree) Symbol (fish and tree)
· Special precautions for user · Hazard identification number (Kemler code): · EMS Number:	Warning: Toxic substances. 60 6.1-04

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Trade name: Lead Citrate, Trihydrate

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· Segregation groups	Heavy metals and their salts (including their organometallic compounds), lead and its compounds
· Stowage Category	A
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· Transport category	2
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN "Model Regulation":	UN 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (LEAD CITRATE, TRIHYDRATE), 6.1, III, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **GHS label elements**
The substance is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS07 GHS08 GHS09

- **Signal word** *Danger*
- **Hazard statements**
Harmful if swallowed or if inhaled.
May damage fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life with long lasting effects.
- **Precautionary statements**
Do not breathe dust/fume/gas/mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** *Substance is not listed.*

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- **Seveso category E1 Hazardous to the Aquatic Environment**
- **Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t**
- **Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t**
- **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.

- **Contact:**

- **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

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Repr. 1A: Reproductive toxicity – Category 1A

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

IL

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

· **1.1 Product identifier**

· **Trade name:** Lead Citrate, Trihydrate

· **Article number:** 17800, 17810

· **CAS Number:**

512-26-5

· **EC number:**

208-141-1

· **Index number:**

082-001-00-6

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

No further relevant information available.

· **Application of the substance / the mixture** Laboratory chemicals

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: info@emsdiasum.com

www.emsdiasum.com

· **Further information obtainable from:** Product safety department

· **1.4 Emergency telephone number:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



health hazard

Repr. 1A H360Df May damage the unborn child. Suspected of damaging fertility.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

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Trade name: **Lead Citrate, Trihydrate**

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· **Hazard pictograms**

GHS07 GHS08 GHS09

· **Signal word** *Danger*· **Hazard statements***H302+H332 Harmful if swallowed or if inhaled.**H360Df May damage the unborn child. Suspected of damaging fertility.**H373 May cause damage to organs through prolonged or repeated exposure.**H410 Very toxic to aquatic life with long lasting effects.*· **Precautionary statements***P260 Do not breathe dust/fume/gas/mist/vapours/spray.**P280 Wear protective gloves/protective clothing/eye protection/face protection.**P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.**P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.**P405 Store locked up.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*· **Additional information:***Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.*· **2.3 Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.1 Chemical characterisation: Substances**· **CAS No. Description***512-26-5 Lead Citrate, Trihydrate*· **Identification number(s)**· **EC number:** 208-141-1· **Index number:** 082-001-00-6

SECTION 4: First aid measures

· **4.1 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:** Call for a doctor immediately.· **4.2 Most important symptoms and effects, both acute and delayed** *No further relevant information available.*

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- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 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 container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing

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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 self-contained respiratory protective device.

· **Protection of hands:**

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.

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.

· **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:** Not required.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· Form:	Solid
· Colour:	Not determined.
· Odour:	Characteristic
· Odour threshold:	Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

· Melting point/freezing point:	Undetermined.
· Initial boiling point and boiling range:	Undetermined.

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Product is not flammable.

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Not determined.

· **Explosive properties:** Product does not present an explosion hazard.

· **Explosion limits:**

· Lower:	Not determined.
· Upper:	Not determined.

· **Vapour pressure:** Not applicable.

· Density:	Not determined.
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.

· **Solubility in / Miscibility with water:** Not determined.

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- | | |
|--|--|
| · Partition coefficient: n-octanol/water: | Not determined. |
| · Viscosity: | |
| Dynamic: | Not applicable. |
| Kinematic: | Not applicable. |
| · 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
Harmful if swallowed or if inhaled.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity**
May damage the unborn child. Suspected of damaging fertility.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure**
May cause damage to organs through prolonged or repeated exposure.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.

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Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

· 12.5 Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

· 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number

· ADR, IMDG, IATA

UN2291

· 14.2 UN proper shipping name

· ADR

2291 LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS

· IMDG

LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT

· IATA

LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate)

· 14.3 Transport hazard class(es)

· ADR, IMDG



· Class

6.1 Toxic substances.

· Label

6.1

· IATA



· Class

6.1 Toxic substances.

· Label

6.1

· 14.4 Packing group

· ADR, IMDG, IATA

III

· 14.5 Environmental hazards:

· Marine pollutant:

*Environmentally hazardous substance, solid; Marine Pollutant
Symbol (fish and tree)*

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· Special marking (ADR):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Toxic substances.
· Hazard identification number (Kemler code):	60
· EMS Number:	6.1-04
· Segregation groups	Heavy metals and their salts (including their organometallic compounds), lead and its compounds
· Stowage Category	A
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	

· ADR	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 g
	Maximum net quantity per outer packaging: 1000 g
· Transport category	2
· Tunnel restriction code	E

· IMDG	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 g
	Maximum net quantity per outer packaging: 1000 g
· UN "Model Regulation":	UN 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (LEAD CITRATE, TRIHYDRATE), 6.1, III, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **Seveso category E1** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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.

- **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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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*Acute Tox. 4: Acute toxicity – Category 4**Repr. 1A: Reproductive toxicity – Category 1A**STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2**Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1**Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1*

GB

化学品安全技术说明书

据根根据据根T 16483-2008, GB/T 17519-2013

打印日期 2021.12.30

在 2021.12.30 审核

1 化学品及企业标识

- **产品识别者**
- **化学品中文名称**、**化学品俗名或商品名**: Lead Citrate, Trihydrate
- **商品编号**: 17800, 17810
- **编号编号**
512-26-5
- **欧盟编号**:
208-141-1
- **欧盟编号**:
082-001-00-6
- **相应纯物质或者混合物的相关下位用途及禁止用途** 无相关详细资料。
- **物质或混合物的用途** 实验室化学物
- **安全技术说明书内供应商详细信息**
- **企业名称**:
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **可获取更多资料的部门**: Product safety department
- **紧急联系电话号码**:
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 危险性概述

· 紧急情况概述:

未决定. 固体, 吞咽或吸入有害。可能对生育能力或胎儿造成伤害。长期或反复接触可能对器官造成伤害。对水生生物毒性极大并具有长期持续影响。

· GHS危险性类别



健康危害

生殖毒性 第1A类 H360 可能对生育能力或胎儿造成伤害
特定靶器官系统毒性 (重复接触) 第2类 H373 长期或反复接触可能对器官造成伤害



环境

对水环境的危害(急性) 第1类 H400 对水生生物毒性极大
对水环境的危害(慢性) 第1类 H410 对水生生物毒性极大并具有长期持续影响



急性毒性(径口) 第4类 H302 吞咽有害
急性毒性(吸入) 第4类 H332 吸入有害

· 标签要素

- **GHS卷标要素** 本化学物质根据化学物质分类及标记全球协调制度(GHS)进行了分类及标记。

(在 2 页继续)

化学品安全技术说明书

据根根据据根T 16483-2008, GB/T 17519-2013

打印日期 2021.12.30

在 2021.12.30 审核

化学品中文名称: 柠檬酸铅
 化学品英文名称: Lead Citrate, Trihydrate
 化学品俗名或商品名: Lead Citrate, Trihydrate

(在 1 页继续)

· 象形图



GHS07 GHS08 GHS09

· 警示词 危险

· 危险性说明

· 吞咽或吸入有害

· 可能对生育能力或胎儿造成伤害

· 长期或反复接触可能对器官造成伤害

· 对水生生物毒性极大并具有长期持续影响

· 防范说明

· 预防措施

· 不要吸入粉尘/烟/气体/烟雾/蒸气/喷雾

· 戴防护手套/穿防护服/戴防护眼罩/戴防护面具

· 应急措施

· 如误吞咽: 如感觉不适, 呼叫急救中心/医生

· 如误吸入: 将人转移到空气新鲜处, 保持呼吸舒适体位

· 贮存

· 存放处须加锁

· 处置

· 处置内装物/容器按照地方/区域/国家/国际规章

· 其他有害性

· PBT(残留性、生物浓缩性、毒性物质) 及 vPvB(高残留性、高生物浓缩性物质)评价结果

· PBT(残留性、生物浓缩性、毒性物质) 不适用的

· vPvB(高残留性、高生物浓缩性物质): 不适用的

3 成分/组成信息

· 纯品

· CAS号 化学名, 通用名

· 512-26-5 Lead Citrate, Trihydrate

· 鉴别编号:

· 欧盟编号: 208-141-1

· 欧盟编号: 082-001-00-6

4 急救措施

· 应急措施要领

· 总说明: 中毒的症状可能会在几个小时以后才出现; 因此在发生事故之后起码要有 48 小时的医疗观察。

· 吸入

· 供给新鲜空气. 如有需要, 提供人工呼吸. 让病人保暖. 如果症状持续则询问医生.

· 万一病人不清醒时, 请让病人侧躺以便移动.

· 皮肤接触: 一般的产品不会刺激皮肤.

· 眼睛接触: 张开眼睛在流水下冲洗数分钟.

· 食入

· 马上召唤医生.

· 给医生的资料:

· 最重要的急慢性症状及其影响 无相关详细资料。

(在 3 页继续)

化学品安全技术说明书

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(在 2 页继续)

· 需要及时的医疗处理及特别处理的症状 无相关详细资料。

5 消防措施

- 灭火方法
- 灭火的方法和灭火剂: 使用适合四周环境的灭火措施。
- 特别危险性 无相关详细资料。
- 特殊灭火方法
- 消防人员特殊的防护装备: 口腔呼吸保护装置。

6 泄漏应急处理

- 保护措施 没有要求。
- 环境保护措施:
如果渗入了水源或污水系统,请通知有关当局。
切勿让其进入下水道/水面或地下水。
- 密封及净化方法和材料:
根据第 13 条条款弃置受污染物。
确保有足够的通风装置。
- 参照其他部分
有关安全处理的资料请参阅第 7 节。
有关个人防护装备的资料请参阅第 8 节。
有关弃置的资料请参阅第 13 节。

7 操作处置与储存

- 操作处置
- 储存 储存 储存
彻底除尘。
确保工作间有良好的通风/排气装置。
小心打开及处理贮藏器。
- 有关火灾及防止爆炸的资料: 提供呼吸保护装置。
- 混合危险性等安全储存条件
- 储存 储存 储存
· 储存库和容器须要达到的要求: 没有特别的要求。
· 有关使用一个普通的储存设施来储存的资料: 不需要。
· 有关储存条件的更多资料: 将容器密封。
· 具体的最终用户 无相关详细资料。

8 接触控制和个体防护

- 工程控制方法: 没有进一步数据;见第 7 项。
- 控制变数
- 在工作场需要监控的限值成分 不要求。
- 额外的资料: 制作期间有效的清单将作为基础来使用。
- 泄漏控制
- 个人防护设备:
- 一般保护和卫生措施:
远离食品、饮料和饲料。

(在 4 页继续)

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(在 3 页继续)

立即除去所有的不洁的和被污染的衣服。
在休息之前和工作完毕后请清洗双手。
分开储存保护性衣服。

· 呼吸系统防护:

如果曾短暂接触或在低污染的情况下,请使用呼吸过滤装置. 如果曾深入或较长时间接触,请使用独立的呼吸保护装置.

· 手防护:

手套的物料必须是不渗透性的,且能抵抗该产品/物质/添加剂。
基于缺乏测试,对于产品/制剂/化学混合物,并不会提供手套材料的建议
选择手套材料时,请注意材料的渗透时间,渗透率和降解参数

· 手套材料 选择合适的手套不单取决于材料,亦取决于质量特征,以及来自哪一间生产厂家

· 渗入手套材料的时间 请向劳保手套生产厂家获取准确的破裂时间并观察实际的破裂时间

· 眼睛防护: 不要求

9 理化特性

· 有关基本物理及化学特性的信息

· 一般说明

外观外观外观

形状形状形状

颜色颜色颜色

气味气味气味

· 嗅觉阈限

固体
未决定.
有特性的
未决定.

· pH值:

不适用的

· 条件的更改

熔点熔点熔点

沸点沸点和沸程

未确定的
未确定的

闪点闪点闪点

不适用的

· 可燃性 (固体、气体): 该产品是不可燃的

· 分解温度:

未决定.

· 自燃温度:

未决定.

· 爆炸的危险性:

该产品并没有爆炸的危险

· 爆炸极限:

较低较低较低

较高较高较高

未决定.
未决定.

· 蒸气压:

不适用的

密度密度密度

· 相对密度

· 蒸气密度

· 蒸发速率

未决定的
未决定.
不适用的
不适用的

· 溶解性

水:

未决定.

辛醇辛醇分配系数:

未决定.

黏性黏性黏性

动态动态动态

不适用的

(在 5 页继续)

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(在 4 页继续)

运动学的: 不适用的

其他信息 无相关详细资料。

10 稳定性和反应性

- 稳定性: 无相关详细资料。
- 稳定性: 稳定
- 分解: 分解避免的情况: 如果遵照规格使用则不会分解。
- 有害性: 有害性可能: 未有已知的危险反应。
- 避免避免的条件: 无相关详细资料。
- 不相容的物质: 无相关详细资料。
- 危险的分解产物: 未知有危险的分解产品。

11 毒理学信息

- 对毒性学影响的信息
- 急性毒性:
- 主要刺激影响:
- 皮肤: 皮肤有刺激性影响。
- 在眼睛上面: 有刺激的影响。
- 致敏: 致敏作用有已知的敏化影响。
- 对以繁殖可能产生影响的数据:
- 作用: 作用: 致癌致畸致突变对生殖系统有害)
- 生殖毒性: 第1A类

12 生态学信息

- 生态毒性
- 水生毒性: 无相关详细资料。
- 持久性和降解性: 持久性和降解性: 无相关详细资料。
- 环境系统习性:
- 潜在的累积: 潜在的累积: 无相关详细资料。
- 土壤流动性: 土壤流动性: 无相关详细资料。
- 生态毒性的影响:
- 备注: 对鱼类有剧毒
- 额外的生态学资料:
- 注释: 注释
- 水危害级别 3 (德国规例) (通过名单进行自我评估): 对水是极其危害的即使是少量, 不要让该产品接触地下水、水道或污水系统。即使是极小量的产品渗入地下也会对饮用水造成危险。对水体中的鱼和浮游生物也有毒害。对水中的有机物有剧毒。
- PBT(残留性、生物浓缩性、毒性物质) 及 vPvB(高残留性、高生物浓缩性物质)评价结果
- PBT(残留性、生物浓缩性、毒性物质) 不适用的
- vPvB(高残留性、高生物浓缩性物质): 不适用的
- 其他其他用途: 其他其他用途: 无相关详细资料。

CN

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(在 5 页继续)

13 废弃处置

废弃处置方法

建议建议建议将该产品和家居垃圾一起丢弃. 不要让该产品接触污水系统.

受污染的容器和包装:

建议建议建议根据官方的规章来丢弃.

14 运输信息

联合国危险货物编号(UN号)

· ADR, IMDG, IATA UN2291

适当适当船名

· ADR 2291 可溶铅化合物, 未另作规定的 (Lead Citrate, Trihydrate), 环境有害
 · IMDG LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT
 · IATA LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate)

运输危险等级

· ADR, IMDG



· 级别

6.1 毒性物质

标签标签

6.1

· IATA



· Class

6.1 毒性物质

· Label

6.1

包装组别

· ADR, IMDG, IATA III

环境危害

该原料对环境有害; Marine Pollutant

海运有害物质

象征符号 (鱼和树)

特别特别标志 (ADR):

象征符号 (鱼和树)

用户特别预防措施

警告: 毒性物质

危险编码:

60

E号码号码

6.1-04

Segregation groups

Heavy metals and their salts (including their organometallic compounds), lead and its compounds

Stowage Category

A

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(在 6 页继续)

· MARPOL73/78(针对船舶引起的海洋污染预防协议)
 附件书根据根据C国际国际船货编(大量大量)
 运送运送运送 不适用的

运输运输额外的资料:

· ADR
 · Excepted quantities (EQ) Code: E1
 Maximum net quantity per inner packaging: 30 g
 Maximum net quantity per outer packaging: 1000 g

· IMDG
 · Limited quantities (LQ) 5 kg
 · Excepted quantities (EQ) Code: E1
 Maximum net quantity per inner packaging: 30 g
 Maximum net quantity per outer packaging: 1000 g

· UN "标准规定": UN 2291 可溶铅化合物, 未另作规定的 (LEAD CITRATE, TRIHYDRATE), 6.1, III, 对环境有害

15 法规信息

- 对相应纯物质或者混合物的安全、保健及环境法规/法律 无相关详细资料。
- 危险化学品安全管理条例
- 危险化学品目录段表 列出物质。
- 化学品首次进口及有毒化学品进出口环境管理规定
- 新化学物质环境管理办法
- 现行国家危险化学品名录 没有列出物质。
- GHS卷标元素 本化学物质根据化学物质分类及标记全球协调制度(GHS)进行了分类及标记。
- 象形图



GHS07 GHS08 GHS09

- 警示词 危险
- 危险性说明
 吞咽或吸入有害
 可能对生育能力或胎儿造成伤害
 长期或反复接触可能对器官造成伤害
 对水生生物毒性极大并具有长期持续影响
- 防范说明
- 预防措施
 不要吸入粉尘/烟/气体/烟雾/蒸气/喷雾
 戴防护手套/穿防护服/戴防护眼罩/戴防护面具
- 应急措施
 如误吞咽:如感觉不适,呼叫急救中心/医生
 如误吸入:将人转移到空气新鲜处,保持呼吸舒适体位
- 贮存
 存放处须加锁
- 处置
 处置内装物/容器按照地方/区域/国家/国际规章

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· 化学物质安全性评价: 尚未进行化学物质安全性评价

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16 其他信息

该资料是基于我们目前的知识。然而,这并不构成对任何特定产品特性的担保并且不建立一个法律上有效的合同关系。

· 联络:

· 缩写:

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

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: 持久性生物累积性有毒物质

vPvB: very Persistent and very Bioaccumulative

急性毒性(经口) 第4类: Acute toxicity – Category 4

生殖毒性 第1A类: Reproductive toxicity – Category 1A

特定靶器官系统毒性 (重复接触) 第2类: Specific target organ toxicity (repeated exposure) – Category 2

对水环境的危害(急性) 第1类: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

对水环境的危害(慢性) 第1类: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

CN

Bezpečnostní list

podle 1907/2006/ES, Článek 31

Datum vydání: 30.12.2021

Revize: 30.12.2021

ODDÍL 1: Identifikace látky/směsi a společnosti/podniku

- **1.1 Identifikátor výrobku**
- **Obchodní označení:** *Lead Citrate, Trihydrate*
- **Číslo výrobku:** 17800, 17810
- **Číslo CAS:**
512-26-5
- **Číslo ES:**
208-141-1
- **Indexové číslo:**
082-001-00-6
- **1.2 Příslušná určená použití látky nebo směsi a nedoporučená použití**
Další relevantní informace nejsou k dispozici.
- **Použití látky / přípravku** *Laboratorní chemikálie*
- **1.3 Podrobné údaje o dodavateli bezpečnostního listu**
- **Identifikace výrobce/dovozce:**
*Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com*
- **Obor poskytující informace:** *Product safety department*
- **1.4 Telefonní číslo pro naléhavé situace:**
*ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887*

ODDÍL 2: Identifikace nebezpečnosti

- **2.1 Klasifikace látky nebo směsi**
- **Klasifikace v souladu s nařízením (ES) č. 1272/2008**



GHS08 nebezpečnost pro zdraví

Repr. 1A H360Df Může poškodit plod v těle matky. Podezření na poškození reprodukční schopnosti.
STOT RE 2 H373 Může způsobit poškození orgánů při prodloužené nebo opakované expozici.



GHS09 životní prostředí

Aquatic Acute 1 H400 Vysoce toxický pro vodní organismy.
Aquatic Chronic 1 H410 Vysoce toxický pro vodní organismy, s dlouhodobými účinky.



GHS07

Acute Tox. 4 H302 Zdraví škodlivý při požití.
Acute Tox. 4 H332 Zdraví škodlivý při vdechování.

- **2.2 Prvky označení**
- **Označování v souladu s nařízením (ES) č. 1272/2008** *Látka je klasifikována a označena podle nařízení CLP.*

(pokračování na straně 2)

Bezpečnostní list

podle 1907/2006/ES, Článek 31

Datum vydání: 30.12.2021

Revize: 30.12.2021

Obchodní označení: Lead Citrate, Trihydrate

(pokračování strany 1)

· **Výstražné symboly nebezpečnosti**



GHS07 GHS08 GHS09

· **Signální slovo Nebezpečí**

· **Standardní věty o nebezpečnosti**

H302+H332 Zdraví škodlivý při požití a při vdechování.

H360Df Může poškodit plod v těle matky. Podezření na poškození reprodukční schopnosti.

H373 Může způsobit poškození orgánů při prodloužené nebo opakované expozici.

H410 Vysoce toxický pro vodní organismy, s dlouhodobými účinky.

· **Pokyny pro bezpečné zacházení**

P260 Nevdechujte prach/dým/plyn/mlhu/páry/aerosoly.

P280 Používejte ochranné rukavice/ochranný oděv/ochranné brýle/obličejový štít/chrániče sluchu.

P301+P312 PŘI POŽITÍ: Necítíte-li se dobře, volejte TOXIKOLOGICKÉ INFORMAČNÍ STŘEDISKO/lékaře.

P304+P340 PŘI VDECHNUTÍ: Přeneste osobu na čerstvý vzduch a ponechte ji v poloze usnadňující dýchání.

P405 Skladujte uzamčené.

P501 Obsah/nádobu likvidujte v souladu s místními/regionálními/národními/mezinárodními předpisy.

· **Další údaje:**

Obsahuje olovo. Nemá se používat na povrchy, které mohou okusovat nebo olizovat děti.

· **2.3 Další nebezpečnost**

· **Výsledky posouzení PBT a vPvB**

· **PBT:** Nedá se použít.

· **vPvB:** Nedá se použít.

ODDÍL 3: Složení/informace o složkách

· **3.1 Chemická charakteristika: Látky**

· **Číslo CAS:**

512-26-5 Lead Citrate, Trihydrate

· **Identifikační číslo(čísla)**

· **Číslo ES:** 208-141-1

· **Indexové číslo:** 082-001-00-6

ODDÍL 4: Pokyny pro první pomoc

· **4.1 Popis první pomoci**

· **Všeobecné pokyny:**

Příznaky otravy se mohou projevit až po mnoha hodinách, proto je nutný lékařský dohled nejméně 48 hodin po nehodě.

· **Při nadýchání:**

Přívod čerstvého vzduchu, případně kyslíkový přístroj, teplo. Při déle trvajících potížích konzultovat lékaře.

Při bezvědomí uložit a přepravit ve stabilní poloze na boku.

· **Při styku s kůží:** Tento produkt nemá všeobecně dráždivý účinek na pokožku.

· **Při zasažení očí:** Oči s otevřenými víčky několik minut vyplachovat proudem tekoucí vody.

· **Při požití:** Ihned vyhledat lékaře.

· **4.2 Nejdůležitější akutní a opožděné symptomy a účinky** Další relevantní informace nejsou k dispozici.

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- **4.3 Pokyn týkající se okamžité lékařské pomoci a zvláštního ošetření**
Další relevantní informace nejsou k dispozici.

ODDÍL 5: Opatření pro hašení požáru

- **5.1 Hasiva**
- **Vhodná hasiva:** Způsob hašení přizpůsobit podmínkám v okolí.
- **5.2 Zvláštní nebezpečnost vyplývající z látky nebo směsi** Další relevantní informace nejsou k dispozici.
- **5.3 Pokyny pro hasiče**
- **Zvláštní ochranné prostředky pro hasiče:** Použít ochranný dýchací přístroj.

ODDÍL 6: Opatření v případě náhodného úniku

- **6.1 Opatření na ochranu osob, ochranné prostředky a nouzové postupy** Není nutné.
- **6.2 Opatření na ochranu životního prostředí:**
Při vniknutí do kanalizace nebo vodního toku informovat příslušné orgány.
Nenechat proniknout do kanalizace/povrchových vod/podzemních vod.
- **6.3 Metody a materiál pro omezení úniku a pro čištění:**
Kontaminovaný materiál odstranit jako odpad podle bodu 13.
Zajistit dostatečné větrání.
- **6.4 Odkaz na jiné oddíly**
Informace o bezpečnému zacházení viz kapitola 7.
Informace o osobní ochranné výstroji viz kapitola 8.
Informace k odstranění viz kapitola 13.

ODDÍL 7: Zacházení a skladování

- **7.1 Opatření pro bezpečné zacházení**
Dobré odprašování.
Na pracovišti zabezpečit dobré větrání a odsávání.
Nádrž opatrně otevřít a zacházet s ní opatrně.
- **Upozornění k ochraně před ohněm a explozí:** Mít připravené ochranné dýchací přístroje.
- **7.2 Podmínky pro bezpečné skladování látek a směsí včetně neslučitelných látek a směsí**
- **Pokyny pro skladování:**
- **Požadavky na skladovací prostory a nádoby:** Žádné zvláštní požadavky.
- **Upozornění k hromadnému skladování:** Není nutné.
- **Další údaje k podmínkám skladování:** Nádrž držet neprodyšně uzavřenou.
- **7.3 Specifické konečné / specifická konečná použití** Další relevantní informace nejsou k dispozici.

ODDÍL 8: Omezování expozice / osobní ochranné prostředky

- **8.1 Kontrolní parametry**
- **Technická opatření:** Žádné další údaje, viz bod 7.

· **Kontrolní parametry:**

512-26-5 Lead Citrate, Trihydrate

NPK	Krátkodobá hodnota: 0,2 mg/m ³ Dlouhodobá hodnota: 0,05 mg/m ³ B, T, jako Pb
-----	--

- **Další upozornění:** Jako podklad sloužily při zhotovení platné listiny.

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- **8.2 Omezování expozice**
- **Osobní ochranné prostředky:**
- **Všeobecná ochranná a hygienická opatření:**
Zdržovat od potravin, nápojů a krmiv.
Zašpiněné, nasáknuté šaty ihned vysvléci.
Před přestávkami a po práci umýt ruce.
Ochranný oděv odděleně přechovávat.
- **Ochrana dýchacích orgánů:**
Při krátkodobém nebo nízkém zatížení použít dýchací přístroj s filtrem, při intenzivním nebo delším zatížení se musí použít dýchací přístroj nezávislý na okolním vzduchu.
- **Ochrana rukou:**
Materiál rukavic musí být nepropustný a odolný proti produktu / látce / směsi.
Vzhledem k tomu, že chybí testy, není možné doporučit materiál rukavic pro produkt / přípravek / chemickou směs.
Výběr materiálu rukavic proveďte podle času průniku, permeability a degradace.
- **Materiál rukavic**
Správný výběr rukavic nezávisí jen na materiálu, ale také na dalších kriteriích, která se liší podle výrobce.
- **Doba průniku materiálem rukavic**
Je nutno u výrobce rukavic zjistit a dodržovat přesné časy průniku materiálem ochranných rukavic.
- **Ochrana očí:** Není potřeba.

ODDÍL 9: Fyzikální a chemické vlastnosti

- **9.1 Informace o základních fyzikálních a chemických vlastnostech**
- **Všeobecné údaje**
- **Vzhled:**

Skupenství:	Pevné
Barva:	Není určeno.
- **Zápach:** Charakteristický
- **Prahová hodnota zápachu:** Není určeno.
- **Hodnota pH:** Nedá se použít.
- **Změna stavu**

Bod tání/bod tuhnutí:	Není určeno.
Počáteční bod varu a rozmezí bodu varu:	Není určeno.
- **Bod vzplanutí:** Nedá se použít.
- **Hořlavost (pevné látky, plyny):** Látka se nedá zapálit.
- **Teplota rozkladu:** Není určeno.
- **Teplota samovznícení:** Není určeno.
- **Výbušné vlastnosti:** U produktu nehrozí nebezpečí exploze.
- **Meze výbušnosti:**

Dolní mez:	Není určeno.
Horní mez:	Není určeno.
- **Tlak páry:** Nedá se použít.
- **Hustota:** Není určeno.
- **Relativní hustota** Není určeno.
- **Hustota páry:** Nedá se použít.
- **Rychlost odpařování** Nedá se použít.

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· Rozpustnost ve / směřitelnost s vodě:	Není určeno.
· Rozdělovací koeficient: n-oktanol/voda:	Není určeno.
· Viskozita:	
Dynamicky:	Nedá se použít.
Kinematicky:	Nedá se použít.
· 9.2 Další informace	Další relevantní informace nejsou k dispozici.

ODDÍL 10: Stálost a reaktivita

- **10.1 Reaktivita** Další relevantní informace nejsou k dispozici.
- **10.2 Chemická stabilita**
- **Termický rozklad / Podmínky, kterých je nutno se vyvarovat:**
Nedochází k rozkladu při doporučeném způsobu použití.
- **10.3 Možnost nebezpečných reakcí** Žádné nebezpečné reakce nejsou známy.
- **10.4 Podmínky, kterým je třeba zabránit** Další relevantní informace nejsou k dispozici.
- **10.5 Neslučitelné materiály:** Další relevantní informace nejsou k dispozici.
- **10.6 Nebezpečné produkty rozkladu:** Nejsou známy žádné nebezpečné produkty při rozkladu.

ODDÍL 11: Toxikologické informace

- **11.1 Informace o toxikologických účincích**
- **Akutní toxicita**
Zdraví škodlivý při požití a při vdechování.
- **Primární dráždivé účinky:**
- **Žíravost/dráždivost pro kůži** Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Vážné poškození očí / podráždění očí** Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Senzibilizace dýchacích cest / senzibilizace kůže**
Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Doplňující toxikologická upozornění:**
- **Účinky CMR (karcinogenita, mutagenita a toxicita pro reprodukci)**
- **Mutagenita v zárodečných buňkách** Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Karcinogenita** Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Toxicita pro reprodukci**
Může poškodit plod v těle matky. Podezření na poškození reprodukční schopnosti.
- **Toxicita pro specifické cílové orgány – jednorázová expozice**
Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Toxicita pro specifické cílové orgány – opakovaná expozice**
Může způsobit poškození orgánů při prodloužené nebo opakované expozici.
- **Nebezpečnost při vdechnutí** Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.

ODDÍL 12: Ekologické informace

- **12.1 Toxicita**
- **Aquatická toxicita:** Další relevantní informace nejsou k dispozici.
- **12.2 Perzistence a rozložitelnost** Další relevantní informace nejsou k dispozici.
- **12.3 Bioakumulační potenciál** Další relevantní informace nejsou k dispozici.
- **12.4 Mobilita v půdě** Další relevantní informace nejsou k dispozici.

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- **Ekotoxické účinky:**
- **Poznámka:** Velmi jedovatý pro ryby.
- **Další ekologické údaje:**
- **Všeobecná upozornění:**
Třída ohrožení vody 3 (Samozařazení): silně ohrožuje vodu
Nesmí vniknout do spodní vody, povodí nebo do kanalizace, ani v malých množstvích.
Ohrožuje pitnou vodu už při proniknutí nepatrného množství do země.
V povodích je také jedovatá pro ryby a plankton.
velmi jedovatá pro vodní organismy
- **12.5 Výsledky posouzení PBT a vPvB**
- **PBT:** Nedá se použít.
- **vPvB:** Nedá se použít.
- **12.6 Jiné nepříznivé účinky** Další relevantní informace nejsou k dispozici.

ODDÍL 13: Pokyny pro odstraňování

- **13.1 Metody nakládání s odpady**
- **Doporučení:** Nesmí se odstraňovat společně s odpady z domácnosti. Nepřipustit únik do kanalizace.
- **Kontaminované obaly:**
- **Doporučení:** Odstranění podle příslušných předpisů.

ODDÍL 14: Informace pro přepravu

- | | |
|--|--|
| <ul style="list-style-type: none"> · 14.1 UN číslo · ADR, IMDG, IATA | <p style="text-align: center;">UN2291</p> |
| <ul style="list-style-type: none"> · 14.2 Oficiální (OSN) pojmenování pro přepravu · ADR · IMDG · IATA | <p>2291 SLOUČENINA OLOVA, ROZPUSTNÁ, J.N. (Lead Citrate, Trihydrate), OHROŽUJÍCÍ ŽIVOTNÍ PROSTŘEDÍ
LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT
LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate)</p> |
| <ul style="list-style-type: none"> · 14.3 Třída/třídy nebezpečnosti pro přepravu · ADR, IMDG | <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <ul style="list-style-type: none"> · třída · Etiketa |
| <ul style="list-style-type: none"> · IATA | <div style="display: flex; justify-content: space-around; align-items: center;">  </div> <ul style="list-style-type: none"> · Class · Label |

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· 14.4 Obalová skupina · ADR, IMDG, IATA	III
· 14.5 Nebezpečnost pro životní prostředí: · Látka znečišťující moře: · Zvláštní označení (ADR):	Látka ohrožující životní prostředí; Marine Pollutant Symbol (ryba a strom) Symbol (ryba a strom)
· 14.6 Zvláštní bezpečnostní opatření pro uživatele · Identifikační číslo nebezpečnosti (Kemlerovo číslo): · EMS-skupina: · Segregation groups · Stowage Category	Varování: Jedovaté látky 60 6.1-04 Heavy metals and their salts (including their organometallic compounds), lead and its compounds A
· 14.7 Hromadná přeprava podle přílohy II úmluvy MARPOL a předpisu IBC	Nedá se použít.
· Přeprava/další údaje:	
· ADR · Omezené množství (LQ) · Vyňatá množství (EQ) · Přepravní kategorie · Kód omezení pro tunely:	5 kg Kód: E1 Nejvyšší čisté množství na vnitřní obal: 30 g Nejvyšší čisté množství na vnější obal: 1000 g 2 E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN "Model Regulation":	UN 2291 SLOUČENINA OLOVA, ROZPUSTNÁ, J.N. (LEAD CITRATE, TRIHYDRATE), 6.1, III, OHROŽUJÍCÍ ŽIVOTNÍ PROSTŘEDÍ

ODDÍL 15: Informace o předpisech

- 15.1 Předpisy týkající se bezpečnosti, zdraví a životního prostředí/specifické právní předpisy týkající se látky nebo směsi
- Rady 2012/18/EU
- Nebezpečné látky jmenovitě uvedené - **PŘÍLOHA I** Látka neobsažena.
- Kategorie Seveso E1 Nebezpečnost pro vodní prostředí
- Kvalifikační množství (v tunách) při uplatnění požadavků pro podlimitní množství 100 t
- Kvalifikační množství (v tunách) při uplatnění požadavků pro nadlimitní množství 200 t
- Rady (ES) č. 1907/2006 **PŘÍLOHA XVII** Omezující podmínky: 30, 63, 72
- Rady (EU) č. 649/2012 Annex I Part I
- Směrnice 2011/65/EU o omezení používání některých nebezpečných látek v elektrických a elektronických zařízeních - Příloha II
Látka neobsažena.
- NAŘÍZENÍ (EU) 2019/1148
- Příloha I - **PREKURZORY VÝBUŠNIN PODLÉHAJÍCÍ OMEZENÍ (Horní mezní hodnota pro účely povolení podle čl. 5 odst. 3)**
Látka neobsažena.

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- **Příloha II - PREKURZORY VÝBUŠNIN PODLÉHAJÍCÍ OZNAMOVÁNÍ** Látka neobsažena.
- **Nařízení (ES) č. 273/2004 o prekursorech drog** Látka neobsažena.
- **Nařízení (ES) č. 111/2005 kterým se stanoví pravidla pro sledování obchodu s prekursory drog mezi Společenstvím a třetími zeměmi**
Látka neobsažena.
- **15.2 Posouzení chemické bezpečnosti:** Posouzení chemické bezpečnosti nebylo provedeno.

ODDÍL 16: Další informace

Údaje se opírají o dnešní stav našich vědomostí, nepředstavují však záruku vlastností produktu a nevznikají tak žádné smluvní právní vztahy.

· **Zkratky a akronymy:**

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Akutní toxicita – Kategorie 4

Repr. 1A: Toxicita pro reprodukci – Kategorie 1A

STOT RE 2: Toxicita pro specifické cílové orgány (opakovaná expozice) – Kategorie 2

Aquatic Acute 1: Nebezpečnost pro vodní prostředí - akutní nebezpečnost pro vodní prostředí – Kategorie 1

Aquatic Chronic 1: Nebezpečnost pro vodní prostředí - dlouhodobá nebezpečnost pro vodní prostředí – Kategorie 1

Sikkerhedsdatablad

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PUNKT 1: Identifikation af stoffet/blandingen og af selskabet/virksomheden

- **1.1 Produktidentifikator**
- **Handelsnavn:** triblydicitrat
- **Artikelnummer:** 17800, 17810
- **CAS-nummer:**
512-26-5
- **EC-nummer:**
208-141-1
- **Indeksnummer:**
082-001-00-6
- **1.2 Relevante identificerede anvendelser for stoffet eller blandingen samt anvendelser, der frarådes**
Der står ingen yderligere, relevante informationer til rådighed.
- **Stoffets/præparatets anvendelse** Laboratoriekemikalier
- **1.3 Nærmere oplysninger om leverandøren af sikkerhedsdatabladet**
- **Producent/leverandør**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **For yderligere information:** Product safety department
- **1.4 Nødtelefon:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

PUNKT 2: Fareidentifikation

- **2.1 Klassificering af stoffet eller blandingen**
- **Klassificering i henhold til forordning (EF) nr. 1272/2008**



GHS08 sundhedsfarer

Repr. 1A H360Df Kan skade det ufødte barn. Mistænkes for at skade forplantningsevnen.
STOT RE 2 H373 Kan forårsage organskader ved længerevarende eller gentagen eksponering.



GHS09 miljø

Aquatic Acute 1 H400 Meget giftig for vandlevende organismer.
Aquatic Chronic 1 H410 Meget giftig med langvarige virkninger for vandlevende organismer.



GHS07

Acute Tox. 4 H302 Farlig ved indtagelse.
Acute Tox. 4 H332 Farlig ved indånding.

- **2.2 Mærkningselementer**
- **Mærkning i henhold til forordning (EF) nr. 1272/2008**
Denne substans er klassificeret og mærket iht. CLP-forordningen.

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Handelsnavn: triblydicitrat

(Fortsat fra side 1)

· Farepiktogrammer



GHS07 GHS08 GHS09

· Signalord Fare

· Faresætninger

H302+H332 Farlig ved indtagelse eller indånding.

H360Df Kan skade det ufødte barn. Mistænkes for at skade forplantningsevnen.

H373 Kan forårsage organskader ved længerevarende eller gentagen eksponering.

H410 Meget giftig med langvarige virkninger for vandlevende organismer.

· Sikkerhedssætninger

P260 Indånd ikke pulver/røg/gas/tåge/damp/spray.

P280 Bær beskyttelseshandsker/beskyttelsestøj/øjebeskyttelse/ansigtsbeskyttelse/hørevern.

P301+P312 I TILFÆLDE AF INDTAGELSE: Ring til en GIFTINFORMATION/læge i tilfælde af ubehag.

P304+P340 VED INDÅNDING: Flyt personen til et sted med frisk luft og sørg for, at vejtrækningen lettes.

P405 Opbevares under lås.

P501 Bortskaffelse af indholdet/holderen i henhold til de lokale/regionale/nationale/internationale forskrifter.

· Yderligere oplysninger:

Indeholder bly. Må ikke anvendes på genstande, som børn vil kunne tygge eller sutte på.

· 2.3 Andre farer

· Resultater af PBT- og vPvB-vurdering

· **PBT:** Ikke relevant.

· **vPvB:** Ikke relevant.

PUNKT 3: Sammensætning af/oplysning om indholdsstoffer

· 3.1 Kemisk betegnelse: Stoffer

· CAS-nr. betegnelse

512-26-5 triblydicitrat

· Identifikationsnummer (-numre)

· **EC-nummer:** 208-141-1

· **Indeksnummer:** 082-001-00-6

PUNKT 4: Førstehjælpsforanstaltninger

· 4.1 Beskrivelse af førstehjælpsforanstaltninger

· Generelle anvisninger:

Forgiftningssymptomer kan optræde med mange timers forsinkelse, derfor skal lægeovervågningen vare mindst 48 timer efter et uheld.

· Efter indånding:

Frisk luft, giv om nødvendigt kunstigt åndedræt, varme. Søg læge, hvis problemerne er vedvarende.

I tilfælde af bevidstløshed skal den tilskadede lægges ned og transporteres i stabilt sideleje.

· Efter hudkontakt: Almindeligvis virker produktet ikke irriterende på huden.

· **Efter øjenkontakt:** Skyl øjnene med åbent øjenlåg i flere minutter under rindende vand.

· **Efter indtagelse:** Søg læge.

· 4.2 Vigtigste symptomer og virkninger, både akutte og forsinkede

Der står ingen yderligere, relevante informationer til rådighed.

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- **4.3 Angivelse af om øjeblikkelig lægehjælp og særlig behandling er nødvendig**
Der står ingen yderligere, relevante informationer til rådighed.

PUNKT 5: Brandbekæmpelse

- **5.1 Slukningsmidler**
- **Egnede slukningsmidler:** Tilpas foranstaltningerne til brandbekæmpelse efter omgivelserne.
- **5.2 Særlige farer i forbindelse med stoffet eller blandingen**
Der står ingen yderligere, relevante informationer til rådighed.
- **5.3 Anvisninger for brandmandskab**
- **Særlige værnemidler:** Bær åndedrætsværn.

PUNKT 6: Forholdsregler over for udslip ved uheld

- **6.1 Personlige sikkerhedsforanstaltninger, personlige værnemidler og nødprocedurer** Ikke påkrævet.
- **6.2 Miljøbeskyttelsesforanstaltninger:**
I tilfælde af indtrængen i vandløb eller kloaksystem skal de pågældende myndigheder underrettes.
Må ikke udledes i kloaksystemet/overfladevand/grundvand.
- **6.3 Metoder og udstyr til inddæmning og oprensning:**
Kontamineret materiale skal bortskaffes som affald ifølge punkt 13.
Sørg for tilstrækkelig udluftning.
- **6.4 Henvisning til andre punkter**
Information om sikker håndtering se kapitel 7.
Informationer vedrørende personlige værnemidler se kapitel 8.
Informationer om bortskaffelse se kapitel 13.

PUNKT 7: Håndtering og opbevaring

- **7.1 Forholdsregler for sikker håndtering**
God afstøvning.
Sørg for god udluftning/udsugning på arbejdspladsen.
Beholdere skal åbnes og håndteres med forsigtighed.
- **Anvisninger vedrørende brand- og eksplosionsbeskyttelse:** Hold åndedrætsværn i beredskab.
- **7.2 Betingelser for sikker opbevaring, herunder eventuel uforenelighed**
- **Opbevaring:**
- **Krav til opbevaringsrum og beholdere:** Ingen særlige krav.
- **Henvisninger vedrørende opbevaring med andre stoffer:** Ikke påkrævet.
- **Yderligere oplysninger vedrørende opbevaringsbetingelserne:** Hold beholderen tætsluttende lukket.
- **7.3 Særlige anvendelser** Der står ingen yderligere, relevante informationer til rådighed.

PUNKT 8: Eksponeringskontrol/personlige værnemidler

- **8.1 Kontrolparametre**
- **Yderligere anvisninger vedrørende udformning af tekniske anlæg:** Ingen yderligere oplysninger, se punkt 7.
- **Indholdsstoffer med arbejdspladsrelaterede grænseværdier, der skal overvåges:** Ikke relevant.
- **Yderligere anvisninger:** Baseret på de lister, der var gældende på tidspunktet for udarbejdelsen.
- **8.2 Eksponeringskontrol**
- **Personlige værnemidler:**
- **Generelle forholdsregler vedrørende beskyttelse og hygiejne:**
Skal holdes borte fra føde- og drikkevarer og foderstoffer.

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Forurenet, gennemvædet tøj skal det tages af med det samme.

Vask hænder inden der holdes pause og ved arbejdsophør.

Adskilt opbevaring af beskyttelsesklædning.

· **Åndedrætsværn:**

Ved kortvarig eller ringe belastning skal der benyttes åndedrætsværn med filter, ved intensiv eller længere eksponering skal der benyttes luftforsynet åndedrætsværn.

· **Håndbeskyttelse:**

Handskematerialet skal være uigennemtrængeligt og kunne tåle produktet/stoffet/præparatet.

På grund af manglende tests kan der ikke anbefales noget handskemateriale til produktet/præparatet/kemikalieblandingen.

Ved valg af handskematerialet skal der tages højde for gennemtrængningstider, permeabilitetstal og nedbrydning.

· **Handskemateriale:**

Valg af en egnet handske afhænger ikke blot af materialet, men også af yderligere kvalitetskriterier og er forskelligt fra den ene fabrikant til den anden.

· **Handskematerialets gennemtrængningstid**

Hos handskefabrikanten skal man forespørge om den nøjagtige gennemtrængningstid og overholde denne.

· **Øjenbeskyttelse:** Ikke påkrævet.

PUNKT 9: Fysiske og kemiske egenskaber

· **9.1 Oplysninger om grundlæggende fysiske og kemiske egenskaber**

· **Generelle oplysninger**

· **Udseende:**

· Form:	Fast
· Farve:	Ikke bestemt.
· Lugt:	Karakteristisk
· Lugttærskel:	Ikke bestemt.

· **pH-værdi:** Ikke relevant.

· **Tilstandsændring**

· **Smeltepunkt/frysepunkt:** Ikke bestemt.

· **Begyndelseskogepunkt og kogepunktsinterval:** Ikke bestemt.

· **Flammepunkt:** Ikke relevant.

· **Antændelighed (fast stof, luftart):** Stoffet er ikke antændeligt.

· **Dekomponeringstemperatur:** Ikke bestemt.

· **Selvantændelsestemperatur:** Ikke bestemt.

· **Eksplorative egenskaber:** Produktet er ikke eksplosivt.

· **Eksplisionsgrænser:**

· **Nedre:** Ikke bestemt.

· **Øvre:** Ikke bestemt.

· **Damptryk:** Ikke relevant.

· **Densitet:** Ikke bestemt.

· **Relativ massefylde:** Ikke bestemt.

· **Dampmassefylde:** Ikke relevant.

· **Fordampningshastighed** Ikke relevant.

· **Opløselighed i/blandbarhed med vand:** Ikke bestemt.

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· Fordeleingskoefficient: n-oktanol/vand:	Ikke bestemt.
· Viskositet:	
dynamisk:	Ikke relevant.
kinematisk:	Ikke relevant.
· 9.2 Andre oplysninger	Der står ingen yderligere, relevante informationer til rådighed.

PUNKT 10: Stabilitet og reaktivitet

- **10.1 Reaktivitet** Der står ingen yderligere, relevante informationer til rådighed.
- **10.2 Kemisk stabilitet**
- **Termisk nedbrydning/forhold, der bør undgås** Ingen nedbrydning ved formålsbestemt brug.
- **10.3 Risiko for farlige reaktioner** Der er ikke kendskab til nogen farlige reaktioner.
- **10.4 Forhold, der skal undgås** Der står ingen yderligere, relevante informationer til rådighed.
- **10.5 Materialer, der skal undgås:** Der står ingen yderligere, relevante informationer til rådighed.
- **10.6 Farlige nedbrydningsprodukter:** Der er ikke kendskab til nogen farlige nedbrydningsprodukter.

PUNKT 11: Toksikologiske oplysninger

- **11.1 Oplysninger om toksikologiske virkninger**
- **Akut toksicitet**
Farlig ved indtagelse eller indånding.
- **Primær irritationsvirkning:**
- **Hudætsning/-irritation**
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Alvorlig øjenskade/øjenirritation**
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Respiratorisk sensibilisering eller hudsensibilisering**
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Yderligere toksikologiske oplysninger:**
- **CMR-virkninger (kræftfremkaldende egenskaber, mutagenicitet og reproduktionstoksicitet)**
- **Kimcellemutagenicitet**
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Kræftfremkaldende egenskaber**
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Reproduktionstoksicitet**
Kan skade det ufødte barn. Mistænkes for at skade forplantningsevnen.
- **Enkel STOT-eksponering**
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Gentagne STOT-eksponeringer**
Kan forårsage organskader ved længerevarende eller gentagne eksponering.
- **Aspirationsfare**
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.

PUNKT 12: Miljøoplysninger

- **12.1 Toksicitet**
- **Toksicitet i vand:** Der står ingen yderligere, relevante informationer til rådighed.
- **12.2 Persistens og nedbrydelighed** Der står ingen yderligere, relevante informationer til rådighed.
- **12.3 Bioakkumuleringspotentiale** Der står ingen yderligere, relevante informationer til rådighed.

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- **12.4 Mobilitet i jord** Der står ingen yderligere, relevante informationer til rådighed.
- **Økotoksicitet**
- **Bemærkning:** Meget giftig for fisk.
- **Yderligere økologiske oplysninger:**
- **Generelle anvisninger:**
Fareklasse for vand 3 (Selvklassificering): stærkt vandforurenende
Må ikke udledes i grundvandet, vandløb eller kloaksystemet, heller ikke i små mængder.
Risiko for forurening af drikkevandet allerede ved udslip af ganske små mængder i undergrunden.
I vandløb også giftig for fisk og plankton.
meget giftig for vandorganismer
- **12.5 Resultater af PBT- og vPvB-vurdering**
- **PBT:** Ikke relevant.
- **vPvB:** Ikke relevant.
- **12.6 Andre negative virkninger** Der står ingen yderligere, relevante informationer til rådighed.

PUNKT 13: Bortskaffelse

- **13.1 Metoder til affaldsbehandling**
- **Anbefaling:** Må ikke bortskaffes sammen med husholdningsaffald. Må ikke udledes i kloaksystemet.
- **Urensede emballager:**
- **Anbefaling:** Bortskaffes i overensstemmelse med myndighedernes forskrifter.

PUNKT 14: Transportoplysninger

- **14.1 UN-nummer**
- **ADR, IMDG, IATA** UN2291
- **14.2 UN-forsendelsesbetegnelse (UN proper shipping name)**
- **ADR** 2291 BLYFORBINDELSE, OPLØSELIG, N.O.S. (triblydicitrat), MILJØFARLIGT
- **IMDG** LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT
- **IATA** LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate)
- **14.3 Transportfareklasse(r)**
- **ADR, IMDG**
- 
- **klasse** 6.1 Giftige stoffer
- **Faremærkat** 6.1
- **IATA**
- 
- **Class** 6.1 Giftige stoffer

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· Label	6.1
· 14.4 Emballagegruppe · ADR, IMDG, IATA	III
· 14.5 Miljøfarer: · Marine pollutant: · Særlige mærkningsbe (ADR):	Miljøfarligt fast stof; Marine Pollutant Symbol (fisk og træ) Symbol (fisk og træ)
· 14.6 Særlige forsigtighedsregler for brugeren · Farenummer (Kemler-tal): · EMS-nummer: · Segregation groups · Stowage Category	Advarsel: Giftige stoffer 60 6.1-04 Heavy metals and their salts (including their organometallic compounds), lead and its compounds A
· 14.7 Bulktransport i henhold til bilag II til MARPOL og IBC-koden	Ikke relevant.
· Transport/yderligere oplysninger:	
· ADR · Begrænsede mængder (LQ) · Undtagne mængder (EQ)	5 kg Kode: E1 Største tilladte nettomængde pr. indvendig emballage: 30 g Største tilladte nettomængde pr. ydre emballage: 1000 g
· Transportkategori · Tunnelrestriktionskode	2 E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN "Model Regulation":	UN 2291 BLYFORBINDELSE, OPLØSELIG, N.O.S. (TRIBLYDICITRAT), 6.1, III, MILJØFARLIGT

PUNKT 15: Oplysninger om regulering

- **15.1 Særlige bestemmelser/særlig lovgivning for stoffet eller blandingen med hensyn til sikkerhed, sundhed og miljø**
- **Direktiv 2012/18/EU**
- **Navngivne farlige stoffer - BILAG I** Stoffet er ikke optaget i listen.
- **Seveso-bestemmelser E1** Farlig for vandmiljøet
- **Tærskelmængde (tons) for anvendelse af Kolonne 2-krav** 100 t
- **Tærskelmængde (tons) for anvendelse af Kolonne 3-krav** 200 t
- **Forordning (EF) nr. 1907/2006 BILAG XVII** Begrænsninger: 30, 63, 72
- **Forordning (EU) Nr. 649/2012 Annex I Part 1**
- **Direktiv 2011/65/EU om begrænsning af anvendelsen af visse farlige stoffer i elektrisk og elektronisk udstyr - Bilag II**
Stoffet er ikke optaget i listen.

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- **FORORDNING (EU) 2019/1148**
- **Bilag I - UDANGSSTOFFER TIL EKSPLOSIVSTOFFER UNDERLAGT BEGRÆNSNINGER (Øvre grænseværdi med henblik på licens i henhold til artikel 5, stk. 3)**
Stoffet er ikke optaget i listen.
- **Bilag II - INDBERETNINGSPLOLIGTIGE UDANGSSTOFFER TIL EKSPLOSIVSTOFFER**
Stoffet er ikke optaget i listen.
- **Forordning (EF) nr. 273/2004 om narkotikapækursorer** Stoffet er ikke optaget i listen.
- **Forordning (EF) Nr. 111/2005 om regler for overvågning af handel med narkotikapækursorer mellem Fællesskabet og tredjelande**
Stoffet er ikke optaget i listen.
- **Nationale forskrifter:**
- **MAL-Code:** 00-6
- **15.2 Kemikaliesikkerhedsvurdering:** Der er ikke udført kemikaliesikkerhedsvurdering.

PUNKT 16: Andre oplysninger

Alle ovenstående angivelser er baseret på vores aktuelle viden, udgør dog ikke nogen tilsikring af produktgenskaber og stifter heller ikke noget kontraktligt retsforhold.

· Forkortelser og akronymer:

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

Måleteknisk Arbejdshygiejnisk Luftbehov

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Akut toksicitet – Kategori 4

Repr. 1A: Reproduktionstoksicitet – Kategori 1A

STOT RE 2: Specifik målorgantoksicitet (gentagen eksponering) – Kategori 2

Aquatic Acute 1: Farlig for vandmiljøet - akut fare for vandmiljøet – Kategori 1

Aquatic Chronic 1: Farlig for vandmiljøet - langtidfare for vandmiljøet – Kategori 1

DK

Veiligheidsinformatieblad volgens 1907/2006/EG, Artikel 31

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RUBRIEK 1: Identificatie van de stof of het mengsel en van de vennootschap/onderneming

- **1.1 Productidentificatie**
- **Handelsnaam:** triloddicitraat
- **Artikelnummer:** 17800, 17810
- **CAS-nummer:**
512-26-5
- **EC-nummer:**
208-141-1
- **Catalogusnummer:**
082-001-00-6
- **1.2 Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik**
Geen verdere relevante informatie verkrijgbaar.
- **Toepassing van de stof / van de bereiding** Laboratoriumchemicaliën
- **1.3 Details betreffende de verstrekker van het veiligheidsinformatieblad**
- **Fabrikant/leverancier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Aurion**
Binnenhaven 5
6709 PD Wageningen
The Netherlands
Tel: 31 317 415094
Fax: 31 317 415955
email: info@aurion.nl
- **Inlichtingengevende sector:** Product safety department
- **1.4 Telefoonnummer voor noodgevallen:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

RUBRIEK 2: Identificatie van de gevaren

- **2.1 Indeling van de stof of het mengsel**
- **Indeling overeenkomstig Verordening (EG) nr. 1272/2008**



GHS08 gezondheidsgevaar

Repr. 1A H360Df Kan het ongeboren kind schaden. Wordt ervan verdacht de vruchtbaarheid te schaden.

STOT RE 2 H373 Kan schade aan organen veroorzaken bij langdurige of herhaalde blootstelling.



GHS09 milieu

Aquatic Acute 1 H400 Zeer giftig voor in het water levende organismen.

Aquatic Chronic 1 H410 Zeer giftig voor in het water levende organismen, met langdurige gevolgen.

(Vervolg op blz. 2)

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GHS07

Acute Tox. 4 H302 Schadelijk bij inslikken.
 Acute Tox. 4 H332 Schadelijk bij inademing.

- **2.2 Etiketteringselementen**
- **Etikettering overeenkomstig Verordening (EG) nr. 1272/2008**
 De stof/product is geclassificeerd en geëtiketteerd volgens de CLP-verordening.
- **Gevarenpictogrammen**



GHS07 GHS08 GHS09

- **Signaalwoord Gevaar**
- **Gevarenaanduidingen**
 H302+H332 Schadelijk bij inslikken en bij inademing.
 H360Df Kan het ongeboren kind schaden. Wordt ervan verdacht de vruchtbaarheid te schaden.
 H373 Kan schade aan organen veroorzaken bij langdurige of herhaalde blootstelling.
 H410 Zeer giftig voor in het water levende organismen, met langdurige gevolgen.
- **Veiligheidsaanbevelingen**
 P260 Stof/rook/gas/nevel/damp/spuitnevel niet inademen.
 P280 Draag beschermende handschoenen/beschermende kleding/oogbescherming/gelaatsbescherming/gehoorbescherming.
 P301+P312 NA INSLIKKEN: bij onwel voelen een ANTIGIFCENTRUM/arts raadplegen.
 P304+P340 NA INADEMING: de persoon in de frisse lucht brengen en ervoor zorgen dat deze gemakkelijk kan ademen.
 P405 Achter slot bewaren.
 P501 De inhoud en de verpakking verwerken volgens de plaatselijke/regionale/nationale/internationale voorschriften.
- **Aanvullende gegevens:**
 Bevat lood. Mag niet worden gebruikt voor voorwerpen waarin kinderen kunnen bijten of waaraan kinderen kunnen zuigen.
- **2.3 Andere gevaren**
- **Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.

RUBRIEK 3: Samenstelling en informatie over de bestanddelen

- **3.1 Chemische karakterisering: Stoffen**
- **CAS-Nr. omschrijving**
 512-26-5 trilooddictraat
- **Identificatienummer(s)**
- **EC-nummer:** 208-141-1
- **Catalogusnummer:** 082-001-00-6

NL

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RUBRIEK 4: Eerstehulpmaatregelen

· 4.1 Beschrijving van de eerstehulpmaatregelen

· Algemene informatie:

Het is mogelijk dat vergiftigingssymptomen pas na vele uren optreden. Om deze reden is medische controle gedurende minstens 48 uur na een ongeval noodzakelijk.

· Na het inademen:

Frisse lucht toedienen, eventueel beademing, warmte. Wanneer de klachten niet ophouden, een arts raadplegen. Bij bewusteloosheid ligging en vervoer in stabiele zijligging.

· Na huidcontact: Over het algemeen is het produkt niet prikkelend voor de huid

· Na oogcontact: Ogen bij geopend ooglid meerdere minuten met stromend water spoelen

· Na inslikken: Onmiddellijk arts raadplegen.

· 4.2 Belangrijkste acute en uitgestelde symptomen en effecten

Geen verdere relevante informatie verkrijgbaar.

· 4.3 Vermelding van de vereiste onmiddellijke medische verzorging en speciale behandeling

Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 5: Brandbestrijdingsmaatregelen

· 5.1 Blusmiddelen

· Geschikte blusmiddelen: Brandblusmaatregelen op omgeving afstemmen.

· 5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt

Geen verdere relevante informatie verkrijgbaar.

· 5.3 Advies voor brandweerlieden

· Speciale beschermende kleding: Ademhalingstoestel aantrekken.

RUBRIEK 6: Maatregelen bij het accidenteel vrijkomen van de stof of het mengsel

· 6.1 Persoonlijke voorzorgsmaatregelen, beschermingsmiddelen en noodprocedures

Niet nodig.

· 6.2 Milieuvoorzorgsmaatregelen:

Bij indringen in afvalwater of riolering moet de bevoegde instantie gewaarschuwd worden.

Niet in de riolering/het oppervlaktewater/het grondwater laten terechtkomen.

· 6.3 InsluTINGS- en reinigingsmethoden en -materiaal:

Besmet materiaal zoals afval volgens punt 13 verwijderen.

Voor voldoende ventilatie zorgen.

· 6.4 Verwijzing naar andere rubrieken

Informatie inzake veilig gebruik - zie hoofdstuk 7.

Informatie inzake persoonlijke beschermingsuitrusting - zie hoofdstuk 8.

Informatie inzake berging - zie hoofdstuk 13.

RUBRIEK 7: Hantering en opslag

· 7.1 Voorzorgsmaatregelen voor het veilig hanteren van de stof of het mengsel

Goed stofvrij maken.

Voor goede ventilatie/afzuiging op de werkplaatsen zorgen.

Tanks voorzichtig openen en behandelen.

· Informatie m.b.t. brand- en ontploffingsgevaar: Ademhalingstoestellen gereedhouden.

· 7.2 Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten

· Opslag:

· Eisen ten opzichte van opslagruimte en tanks: Geen bijzondere eisen.

· Informatie m.b.t. gezamenlijke opslag: Niet noodzakelijk.

· Verdere inlichtingen over eisen m.b.t. de opslag: Tanks ondoordringbaar gesloten houden.

(Vervolg op blz. 4)

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- **7.3 Specifiek eindgebruik** Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 8: Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

- **8.1 Controleparameters**
- **Aanvullende gegevens m.b.t. de inrichting van technische installaties:** Geen aanvullende gegevens. Zie 7.
- **Bestanddelen met grenswaarden die m.b.t. de werkruimte in acht genomen moeten worden:** Vervalt.
- **Aanvullende gegevens:** Als basis dienden lijsten die bij opstelling geldig waren.
- **8.2 Maatregelen ter beheersing van blootstelling**
- **Persoonlijke beschermingsvoorzieningen:**
- **Algemene beschermings- en gezondheidsmaatregelen:**
Verwijderd houden van eet- en drinkwaren.
Verontreinigde kleding onmiddellijk uittrekken.
Vóór de pauze en aan het einde van werktijd handen wassen.
Beschermende kleding afzonderlijk bewaren.
- **Ademhalingsbescherming:**
Bij korte of geringe belasting ademfiltertoestel; bij intensieve resp. langdurige expositie een van de omringende lucht onafhankelijk ademhalingstoestel gebruiken.
- **Handbescherming:**
Het handschoenmateriaal moet ondoorlatend en bestand zijn tegen het product / de stof / de bereiding.
Op grond van falende testen kan geen aanbeveling voor handschoenmateriaal voor het product / de bereiding / het chemicaliën mengsel afgegeven worden.
Kies handschoenmateriaal rekening houdend met de penetratietijden, de permeatiegraden en de degradatie.
- **Handschoenmateriaal**
De keuze van een geschikte handschoen is niet alleen afhankelijk van het materiaal, maar ook van andere kwaliteitskenmerken en verschilt van fabrikant tot fabrikant.
- **Doordringingstijd van het handschoenmateriaal**
De precieze penetratietijd kunt u te weten komen bij de handschoenfabrikant; houd er rekening mee.
- **Oogbescherming:** Niet noodzakelijk.

RUBRIEK 9: Fysische en chemische eigenschappen

- **9.1 Informatie over fysische en chemische basiseigenschappen**
- **Algemene gegevens**
- **Voorkomen:**

Vorm:	Vast
Kleur:	Niet bepaald.
Geur:	Karakteristiek
Geurdrempelwaarde:	Niet bepaald.
- **pH-waarde:** Niet bruikbaar.
- **Toestandsverandering**

Smelt-/vriespunt:	Niet bepaald.
Beginkookpunt en kooktraject:	Niet bepaald.
- **Vlampunt:** Niet bruikbaar.
- **Ontvlambaarheid (vast, gas):** De stof is niet ontvlambaar.
- **Ontledingstemperatuur:** Niet bepaald.
- **Zelfontbrandingstemperatuur:** Niet bepaald.

(Vervolg op blz. 5)

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· Ontploffingseigenschappen:	Het produkt is niet ontploffingsgevaarlijk.
· Ontploffingsgrenzen:	
Onderste:	Niet bepaald.
Bovenste:	Niet bepaald.
· Dampspanning:	Niet bruikbaar.
Dichtheid:	Niet bepaald.
· Relatieve dichtheid	Niet bepaald.
· Dampdichtheid	Niet bruikbaar.
· Verdampingsnelheid	Niet bruikbaar.
· Oplosbaarheid in/mengbaarheid met Water:	Niet bepaald.
· Verdelingscoëfficiënt: n-octanol/water:	Niet bepaald.
· Viscositeit	
Dynamisch:	Niet bruikbaar.
Kinematisch:	Niet bruikbaar.
· 9.2 Overige informatie	Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 10: Stabiliteit en reactiviteit

- **10.1 Reactiviteit** Geen verdere relevante informatie verkrijgbaar.
- **10.2 Chemische stabiliteit**
- **Thermische afbraak / te vermijden omstandigheden:** Geen afbraak bij gebruik volgens voorschrift.
- **10.3 Mogelijke gevaarlijke reacties** Geen gevaarlijke reacties bekend.
- **10.4 Te vermijden omstandigheden** Geen verdere relevante informatie verkrijgbaar.
- **10.5 Chemisch op elkaar inwerkende materialen:** Geen verdere relevante informatie verkrijgbaar.
- **10.6 Gevaarlijke ontledingsproducten:** Geen gevaarlijke ontbindingsproducten bekend.

RUBRIEK 11: Toxicologische informatie

- **11.1 Informatie over toxicologische effecten**
- **Acute toxiciteit**
Schadelijk bij inslikken en bij inademing.
- **Primaire aandoening:**
- **Huidcorrosie/-irritatie** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Ernstig oogletsel/oogirritatie** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Sensibilisatie van de luchtwegen/de huid**
Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Aanvullende toxicologische informatie:**
- **CMR-effecten (kankerverwekkendheid, mutageniteit en giftigheid voor de voortplanting)**
- **Mutageniteit in geslachtscellen** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Kankerverwekkendheid** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Giftigheid voor de voortplanting**
Kan het ongeboren kind schaden. Wordt ervan verdacht de vruchtbaarheid te schaden.
- **STOT bij eenmalige blootstelling** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **STOT bij herhaalde blootstelling**
Kan schade aan organen veroorzaken bij langdurige of herhaalde blootstelling.

(Vervolg op blz. 6)

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- **Gevaar bij inademing** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.

RUBRIEK 12: Ecologische informatie

- **12.1 Toxiciteit**
- **Aquatische toxiciteit:** Geen verdere relevante informatie verkrijgbaar.
- **12.2 Persistentie en afbreekbaarheid** Geen verdere relevante informatie verkrijgbaar.
- **12.3 Bioaccumulatie** Geen verdere relevante informatie verkrijgbaar.
- **12.4 Mobiliteit in de bodem** Geen verdere relevante informatie verkrijgbaar.
- **Ecotoxische effecten:**
- **Opmerking:** Zeer giftig voor vissen.
- **Verdere ecologische informatie:**
- **Algemene informatie:**
Waterbezwaarlijkheid (NL): Z(1) niet afbreekbare stoffen met gevaarlijke eigenschappen voor mens en milieu (carcinogeniteit/mutageniteit/ reprotoxiciteit/bioaccumulerend vermogen/ toxiciteit of persistentie)
Gevaar voor water klasse 3 (D) (Zelfclassificatie): gevaar voor water groot
Niet lozen in grondwater, oppervlaktewater of riolering, ook niet in kleine hoeveelheden.
Gevaar voor drinkwater zelfs bij het uitlopen van zeer geringe hoeveelheden in de ondergrond.
In oppervlaktewater ook giftig voor vissen en plankton.
zeer giftig voor in het water levende organismen
- **12.5 Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.
- **12.6 Andere schadelijke effecten** Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 13: Instructies voor verwijdering

- **13.1 Afvalverwerkingsmethoden**
- **Aanbeveling:** Mag niet tesamen met huisvuil gestort worden of in de riolering terechtkomen.
- **Niet gereinigde verpakkingen:**
- **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.

RUBRIEK 14: Informatie met betrekking tot het vervoer

- **14.1 VN-nummer**
- **ADR, IMDG, IATA** UN2291
- **14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN**
- **ADR** 2291 LOODVERBINDING, OPLOSBAAR, N.E.G. (trilooddictraat), MILIEUGEVAARLIJK
- **IMDG** LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT
- **IATA** LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate)

(Vervolg op blz. 7)

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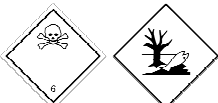
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· **14.3 Transportgevaarenklasse(n)**

· **ADR, IMDG**



· **klasse**
· **Etiket**

6.1 Giftige stoffen
6.1

· **IATA**



· **Class**
· **Label**

6.1 Giftige stoffen
6.1

· **14.4 Verpakkingsgroep:**

· **ADR, IMDG, IATA**

III

· **14.5 Milieugevaren:**

· **Marine pollutant:**

· **Bijzondere kenmerking (ADR):**

Milieugevaarlijke vaste stof; Marine Pollutant
Symbool (vis en boom)
Symbool (vis en boom)

· **14.6 Bijzondere voorzorgen voor de gebruiker**

· **Gevaarsidentificatienummer (Kemler-getal):**

· **EMS-nummer:**

· **Segregation groups**

· **Stowage Category**

Waarschuwing: Giftige stoffen

60

6.1-04

Heavy metals and their salts (including their organometallic compounds), lead and its compounds

A

· **14.7 Vervoer in bulk overeenkomstig bijlage II bij Marpol en de IBC-code**

Niet bruikbaar.

· **Transport/verdere gegevens:**

· **ADR**

· **Beperkte hoeveelheden (LQ)**

· **Uitzonderde hoeveelheden (EQ)**

5 kg

Code: E1

Grootste netto hoeveelheid per binnenverpakking: 30 g

Grootste netto hoeveelheid per buitenverpakking: 1000 g

· **Vervoerscategorie**

· **Tunnelbeperkingscode**

2

E

· **IMDG**

· **Limited quantities (LQ)**

· **Excepted quantities (EQ)**

5 kg

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

· **VN "Model Regulation":**

UN 2291 LOODVERBINDING, OPLOSBAAR, N.E.G.
(TRILOODDICTRAAT), 6.1, III, MILIEUGEVAARLIJK

(Vervolg op blz. 8)

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RUBRIEK 15: Regelgeving

- **15.1 Specifieke veiligheids-, gezondheids- en milieureglementen en -wetgeving voor de stof of het mengsel**
- **SZW-lijst van kankerverwekkende stoffen** De stof is niet aanwezig.
- **SZW-lijst van mutagene stoffen** De stof is niet aanwezig.
- **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid 2**
- **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling 1A**
- **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding** De stof is niet aanwezig.
- **Lijst Zeer Zorgwekkende Stoffen (ZZS)** De stof is aanwezig.
- **Lijst van Potentieel Zeer Zorgwekkende Stoffen** De stof is niet aanwezig.
- **Richtlijn 2012/18/EU**
- **Gevaarlijke stoffen die met naam genoemd worden - BIJLAGE I** De stof is niet aanwezig.
- **Seveso-categorie E1** Gevaar voor het aquatisch milieu
- **Drempelwaarde (ton) voor toepassing van voorschriften voor lagedrempelinrichtingen** 100 t
- **Drempelwaarde (ton) voor toepassing van voorschriften voor hogedrempelinrichtingen** 200 t
- **Verordening (EG) nr. 1907/2006 BIJLAGE XVII** Beperkingsvoorwaarden: 30, 63, 72
- **Verordening (EU) Nr. 649/2012 Annex I Part 1**
- **Richtlijn 2011/65/EU betreffende beperking van het gebruik van bepaalde gevaarlijke stoffen in elektrische en elektronische apparatuur - Bijlage II**
De stof is niet aanwezig.
- **VERORDENING (EU) 2019/1148**
- **Bijlage I - PRECURSOREN VOOR EXPLOSIEVEN WAARVOOR EEN BEPERKING GELDT (Bovengrenswaarde ten behoeve van vergunningverlening op grond van artikel 5, lid 3)**
De stof is niet aanwezig.
- **Bijlage II - PRECURSOREN VOOR EXPLOSIEVEN DIE MOETEN WORDEN GEMELD**
De stof is niet aanwezig.
- **Verordening (EG) nr. 273/2004 inzake drugsprecursoren** De stof is niet aanwezig.
- **Verordening (EG) Nr. 111/2005 houdende voorschriften voor het toezicht op de handel tussen de Gemeenschap en derde landen in drugsprecursoren**
De stof is niet aanwezig.
- **Nationale voorschriften:**
- **Gevaarklasse v. water:**
Waterbezwaarlijkheid (NL): Z(1) niet afbreekbare stoffen met gevaarlijke eigenschappen voor mens en milieu (carcinogeniteit/mutageniteit/ reprotoxiciteit/bioaccumulerend vermogen/ toxiciteit of persistentie)
- **15.2 Chemischeveiligheidsbeoordeling:** Een chemische veiligheidsbeoordeling is niet uitgevoerd.

RUBRIEK 16: Overige informatie

Deze gegevens zijn gebaseerd op de huidige stand van onze kennis. Zij beschrijven echter geen garantie van produkteigenschappen en vestigen geen contractuele rechtsbetrekking.

- **Afkortingen en acroniemen:**
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
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxiciteit – Categorie 4
Repr. 1A: Voortplantingstoxiciteit – Categorie 1A
STOT RE 2: Specifieke doelorgaan toxiciteit bij herhaalde blootstelling – Categorie 2
Aquatic Acute 1: Gevaar voor het aquatisch milieu - acuut aquatisch gevaar – Categorie 1
Aquatic Chronic 1: Gevaar voor het aquatisch milieu - aquatisch gevaar op lange termijn – Categorie 1

Käyttöturvallisuustiedote

1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 30.12.2021

Tarkistus: 30.12.2021

KOHTA 1: Aineen tai seoksen ja yhtiön tai yrityksen tunnistetiedot

- **1.1 Tuotetunniste**
- **Kauppanimike:** Lead Citrate, Trihydrate
- **Artikkelinumero:** 17800, 17810
- **CAS-numero:**
512-26-5
- **EY-numero:**
208-141-1
- **Indeksinumero:**
082-001-00-6
- **1.2 Aineen tai seoksen merkitykselliset tunnistetut käytöt ja käytöt, joita ei suositella**
Merkittäviä lisätietoja ei ole saatavilla.
- **Aineen / valmisteiden käyttö** Laboratoriokemikaalit
- **1.3 Käyttöturvallisuustiedotteen toimittajan tiedot**
- **Valmistaja/toimittaja:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Tietoja antaa:** Product safety department
- **1.4 Häätöpuhelinnumero:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

KOHTA 2: Vaaran yksilöinti

- **2.1 Aineen tai seoksen luokitus**
- **Luokitus asetuksen (EY) N:o 1272/2008 mukaisesti**



GHS08 terveysvaara

Repr. 1A H360Df Voi vaurioittaa sikiötä. Epäillään heikentävän hedelmällisyyttä.
STOT RE 2 H373 Saattaa vahingoittaa elimiä pitkäaikaisessa tai toistuvassa altistumisessa.



GHS09 ympäristö

Aquatic Acute 1 H400 Erittäin myrkyllistä vesieläimille.
Aquatic Chronic 1 H410 Erittäin myrkyllistä vesieläimille, pitkäaikaisia haittavaikutuksia.



GHS07

Acute Tox. 4 H302 Haitallista nieltynä.
Acute Tox. 4 H332 Haitallista hengitettynä.

- **2.2 Merkinnät**
- **Merkinnät asetuksen (EY) N:o 1272/2008 mukaisesti** Aine on luokiteltu ja merkitty CLP-asetuksen mukaan.

(jatkuu sivulla 2)

Käyttöturvallisuustiedote

1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 30.12.2021

Tarkistus: 30.12.2021

Kauppanimike: Lead Citrate, Trihydrate

(jatkuu sivulla 1)

· **Varoitusmerkit**



GHS07 GHS08 GHS09

· **Huomiosana Vaara**

· **Vaaralausekkeet**

H302+H332 Haitallista nieltynä tai hengitettynä.

H360Df Voi vaurioittaa sikiötä. Epäillään heikentävän hedelmällisyyttä.

H373 Saattaa vahingoittaa elimiä pitkäaikaisessa tai toistuvassa altistumisessa.

H410 Erittäin myrkyllistä vesielioille, pitkäaikaisia haittavaikutuksia.

· **Turvalausekkeet**

P260 Älä hengitä pölyä/savua/kaasua/sumua/höyryä/suihketta.

P280 Käytä suojakäsineitä/ suojavaatetusta/ silmiensuojainta/ kasvonsuojainta/ kuulonsuojainta.

P301+P312 JOS KEMIKAALIA ON NIELTY: Ota yhteys MYRKYTYSTIETOKESKUKSEEN/lääkäriin jos ilmenee pahoinvointia.

P304+P340 JOS KEMIKAALIA ON HENGITETTY: Siirrä henkilö raittiiseen ilmaan ja varmista vaivaton hengitys.

P405 Varastoi lukitussa tilassa.

P501 Hävitä säiliö(t) noudattaen paikallisia/alueellisia/kansallisia/kansainvälisiä määräyksiä.

· **Lisätietoja:**

Sisältää lyijyä. Ei saa käyttää pintoihin, joita lapset voivat pureskella tai imeä.

· **2.3 Muut vaarat**

· **PBT- ja vPvB-arvioinnin tulokset**

· **PBT:** Ei voida käyttää.

· **vPvB:** Ei voida käyttää.

KOHTA 3: Koostumus ja tiedot aineosista

· **3.1 Kemialliset ominaisuudet: Aineet**

· **CAS-nro. nimike**

512-26-5 Lead Citrate, Trihydrate

· **Tunnistusnumero(t)**

· **EY-numero:** 208-141-1

· **Indeksinumero:** 082-001-00-6

KOHTA 4: Ensiaputoimenpiteet

· **4.1 Ensiaputoimenpiteiden kuvaus**

· **Yleisohjeet:**

Myrkytysoireet voivat ilmaantua vasta useiden tuntien kuluttua. Tästä syystä henkilöt on pidettävä lääkärin tarkkailun alaisena ainakin 48 tuntia onnettomuuden jälkeen.

· **Hengitettynä:**

Huolehdyttävä raittiin ilman saannista, tarvittaessa annettava tekohengitystä, pidettävä lämpimänä. Oireiden jatkuessa pyydettyä lääkärin apua.

Tajuton pidettävä ja kuljetettava kyljellään.

· **Ihokosketuksessa:** Aine ei yleensä ärsytä ihoa.

· **Aineen päästyä silmiin:** Silmiä huuhdotaan luomet auki juoksevan veden alla useita minutteja.

· **Nieltyä:** Saatettava lääkärin hoitoon.

· **4.2 Tärkeimmät oireet ja vaikutukset, sekä välittömät että viivästyneet Merkittäviä lisätietoja ei ole saatavilla.**

(jatkuu sivulla 3)

Käyttöturvallisuustiedote

1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 30.12.2021

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Kauppanimike: Lead Citrate, Trihydrate

(jatkuu sivulla 2)

- **4.3 Mahdollisesti tarvittavaa välitöntä lääketieteellistä apua ja erityishoitoa koskevat ohjeet**
Merkittäviä lisätietoja ei ole saatavilla.

KOHTA 5: Palontorjuntatoimenpiteet

- **5.1 Sammutusaineet**
- **Sopivat sammutusaineet:** Palontorjuntatoimenpiteet ympäristöä vastaavasti.
- **5.2 Aineesta tai seoksesta johtuvat erityiset vaarat** Merkittäviä lisätietoja ei ole saatavilla.
- **5.3 Palontorjuntaa koskevat ohjeet**
- **Erityinen suojarustus:** Käytettävä hengityssuojainta.

KOHTA 6: Toimenpiteet onnettomuuspäästöissä

- **6.1 Varotoimenpiteet, henkilösuojaimet ja menettely hätätilanteessa** Ei tarvita.
- **6.2 Ympäristöön kohdistuvat varotoimet:**
Jos ainetta on päässyt viemäriin tai vesistöön, ilmoitettava asianomaiselle virastolle.
Estettävä pääsy viemäriin/pintavesiin/pohjaveteen.
- **6.3 Suojarakenteita ja puhdistusta koskevat menetelmät ja -välineet:**
Saastunut aine on jätteenä hävitettävä kohdan 13 mukaisesti.
Huolehdittava riittävästä tuuleutuksesta.
- **6.4 Viittaukset muihin kohtiin**
Turvallista käsittelyä koskevia ohjeita kappaleessa 7.
Henkilökohtaista suojarustusta koskevia ohjeita kappaleessa 8.
Aineen hävitystä koskevia ohjeita kappaleessa 13.

KOHTA 7: Käsittely ja varastointi

- **7.1 Turvallisen käsittelyn edellyttämät toimenpiteet**
Hyvä pölynpoisto.
Huolehdittava hyvästä tuuleutuksesta/imusta työpaikalla.
Säiliöt avattava ja käsiteltävä varovasti.
- **Palo- ja räjähdysuojaohjeet:** Pidettävä hengityssuojain käyttövalmiina.
- **7.2 Turvallisen varastoinnin edellyttämät olosuhteet, mukaan luettuina yhteensopimattomuudet**
- **Varastointi:**
- **Varastotiloille ja säiliöille asetettavat vaatimukset:** Ei erikoisvaatimuksia.
- **Yhteisvarastointiohjeet:** Ei tarvita.
- **Lisätietoja varastointiehtoihin:** Astiat on pidettävä tiiviisti suljettuina.
- **7.3 Erityinen loppukäyttö** Merkittäviä lisätietoja ei ole saatavilla.

KOHTA 8: Altistumisen ehkäiseminen ja henkilösuojaimet

- **8.1 Valvontaa koskevat muuttajat**
- **Lisäohjeita teknisten laitteiden varustukseen:** Ei muita tietoja, ks. kohta 7.
- **Aineosat työpaikkakohtaisin valvottavin raja-arvoin:** Tarpeeton.
- **Lisäohjeet:** Tiedot perustuvat valmistushetkellä voimassaoleviin luetteloihin.
- **8.2 Altistumisen ehkäiseminen**
- **Henkilökohtainen suojarustus:**
- **Yleiset suoja- ja hygieniatoimenpiteet:**
Pidettävä loitolla elintarvikkeista, juomista ja rehuista.
Likaantuneet, aineen saastuttamat vaatekappaleet on riisuttava välittömästi.

(jatkuu sivulla 4)

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(jatkuu sivulla 3)

Kädet on pestävä ennen taukoja ja työn päätyttyä.

Suojavaatetus on säilytettävä erikseen.

· **Hengityssuoja:**

Lyhytaikaisessa tai vähäisessä altistuksessa hengityssuojasuodin; intensiivisessä tai pitempiaikaisessa rasituksessa ulkoilmasta riippumaton hengityssuojain.

· **Käsisuojus:**

Käsinemateriaalin tulee olla tuotetta/ainetta/valmistetta kestävä ja läpäisemätöntä.

Puuttuvien testien vuoksi suositusta soveltuvasta suojakäsinemateriaalista tuotteelle/ valmisteelle / kemikaalisekoitteelle ei voida antaa.

Suojakäsinemateriaalin valinnassa on otettava huomioon läpäisyajat, läpäisevyyskerroin ja kuluminen.

· **Käsinemateriaali**

Soveltuvan käsinetyypin valikoima ei riipu yksinomaan materiaalista vaan myös muista laatuominaisuuksista ja vaihtelee eri valmistajilla.

· **Käsinemateriaalin läpäisy aika**

Tarkka läpäisy aika on selvitettävä suojakäsinevalmistajalta ja sitä on noudatettava.

· **Silmäsuojus:** Ei tarvita.

KOHTA 9: Fysikaaliset ja kemialliset ominaisuudet

· **9.1 Fysikaalisia ja kemiallisia perusominaisuuksia koskevat tiedot**

· **Yleiset ohjeet**

· **Olomuoto:**

Muoto: Kiinteä

Väri: Ei määrätty.

· **Haju:** Tyypillinen

· **Hajukynnys:** Ei määrätty.

· **pH-arvo:** Ei voida käyttää.

· **Tilanmuutos**

Sulamis- tai jäätymispiste: Ei määrätty.

Kiehumispiste ja kiehumisalue: Ei määrätty.

· **Leimahduspiste:** Ei voida käyttää.

· **Syttyvyys (kiinteät aineet, kaasut):** Aine ei ole syttyvä.

· **Hajoamislämpötila:** Ei määrätty.

· **Itsesyttymislämpötila:** Ei määrätty.

· **Räjähävyys:** Tuote ei ole räjähdysvaarallinen.

· **Räjähdysrajat:**

Alempi: Ei määrätty.

Ylempi: Ei määrätty.

· **Höyrypaine:** Ei voida käyttää.

· **Tiheys:** Ei määrätty.

· **Suhteellinen tiheys:** Ei määrätty.

· **Höyryntiheys:** Ei voida käyttää.

· **Haihtumisnopeus:** Ei voida käyttää.

· **Liukenevuus/sekoittuvuus**

veteen: Ei määrätty.

· **Jakautumiskerroin: n-oktanoliväsi:** Ei määrätty.

(jatkuu sivulla 5)

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(jatkuu sivulla 4)

- | | |
|--------------------------|--|
| · Viskositeetti: | |
| Dynaaminen: | Ei voida käyttää. |
| Kinemaattinen: | Ei voida käyttää. |
| · 9.2 Muut tiedot | Merkittäviä lisätietoja ei ole saatavilla. |

KOHTA 10: Stabiilisuus ja reaktiivisuus

- **10.1 Reaktiivisuus** Merkittäviä lisätietoja ei ole saatavilla.
- **10.2 Kemiallinen stabiilisuus**
- **Terminen hajoavuus / vältettävät olosuhteet:** Ei hajaantumista määräystenmukaisessa käytössä.
- **10.3 Vaarallisten reaktioiden mahdollisuus** Ei tiedossa vaarallisia reaktioita.
- **10.4 Vältettävät olosuhteet** Merkittäviä lisätietoja ei ole saatavilla.
- **10.5 Yhteensopimattomat materiaalit:** Merkittäviä lisätietoja ei ole saatavilla.
- **10.6 Vaaralliset hajoamistuotteet:** Tiedossa ei ole vaarallisia hajoamistuotteita.

KOHTA 11: Myrkyllisyyteen liittyvät tiedot

- **11.1 Tiedot myrkyllisistä vaikutuksista**
- **Välitön myrkyllisyys**
Haitallista nieltynä tai hengitettynä.
- **Ensisijainen ärsyttävä vaikutus:**
- **Ihosyövyttävyyksi/ihoärsytys** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Vakava silmävaurio/silmä-ärsytys** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Hengitysteiden tai ihon herkistyminen** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Toksikologisia lisätietoja:**
- **CMR-vaikutukset eli syöpää aiheuttavat, perimää vaurioittavat ja lisääntymiselle vaaralliset vaikutukset**
- **Sukusolujen perimää vaurioittavat vaikutukset** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Syöpää aiheuttavat vaikutukset** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Lisääntymiselle vaaralliset vaikutukset**
Voi vaurioittaa sikiötä. Epäillään heikentävän hedelmällisyyttä.
- **Elinکوhtainen myrkyllisyys – kerta-altistuminen**
Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Elinکوhtainen myrkyllisyys – toistuva altistuminen**
Saattaa vahingoittaa elimiä pitkäaikaisessa tai toistuvassa altistumisessa.
- **Aspiraatiovaara** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.

KOHTA 12: Tiedot vaarallisuudesta ympäristölle

- **12.1 Myrkyllisyys**
- **Vesimyrkyllisyys:** Merkittäviä lisätietoja ei ole saatavilla.
- **12.2 Pysyvyys ja hajoavuus** Merkittäviä lisätietoja ei ole saatavilla.
- **12.3 Biokertyvyys** Merkittäviä lisätietoja ei ole saatavilla.
- **12.4 Liikkuvuus maaperässä** Merkittäviä lisätietoja ei ole saatavilla.
- **Ekotoksiset vaikutukset:**
- **Huomautus:** Erittäin myrkyllinen kaloille
- **Ekologia lisätietoja:**
- **Yleisohjeita:**
Vesistövaarallisuusluokka 3 (Oma luokitus): voimakkaasti vesistöä vaarantava
Estetään pääsy pohjaveteen, vesistöihin, viemäristöön; myöskin pieninä määrinä.

(jatkuu sivulla 6)

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Juomavesi vaaraantuu jo pieninten määrien päästessä maaperään.

Vesistöihin päästyään myrkyllistä kaloille ja planktonille.

erittäin myrkyllinen vesieläölle

· **12.5 PBT- ja vPvB-arvioinnin tulokset**

· **PBT:** Ei voida käyttää.

· **vPvB:** Ei voida käyttää.

· **12.6 Muut haitalliset vaikutukset** Merkittäviä lisätietoja ei ole saatavilla.

KOHTA 13: Jätteiden käsittelyyn liittyvät näkökohdat

· **13.1 Jätteiden käsittelymenetelmät**

· **Suositus:** Ei voida hävittää yhdessä talousjätteiden kanssa. Ei saa päästää viemäristöön.

· **Puhdistamattomat pakkaukset:**

· **Suositus:** Hävitettävä virallisten määräysten mukaisesti.

KOHTA 14: Kuljetustiedot

· **14.1 YK-numero**

· **ADR, IMDG, IATA**

UN2291

· **14.2 Kuljetuksessa käytettävä virallinen nimi**

· **ADR**

2291 LYIJY-YHDISTE, LIUKENEVA, N.O.S. (Lead Citrate, Trihydrate), YMPÄRISTÖLLE VAARALLINEN LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT

· **IMDG**

· **IATA**

LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate)

· **14.3 Kuljetuksen vaaraluokka**

· **ADR, IMDG**



· **luokka**

6.1 Myrkylliset aineet

· **Lipuke**

6.1

· **IATA**



· **Class**

6.1 Myrkylliset aineet

· **Label**

6.1

· **14.4 Pakkausryhmä**

· **ADR, IMDG, IATA**

III

· **14.5 Ympäristövaarat:**

Ympäristölle vaarallinen aine, kiinteä; Marine Pollutant

· **Marine pollutant:**

Symboli (kala ja puu)

· **Erityistä merkintää (ADR):**

Symboli (kala ja puu)

(jatkuu sivulla 7)

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(jatkuu sivulla 6)

· 14.6 Erityiset varotoimet käyttäjälle	Varoitus: Myrkylliset aineet
· Vaaran tunnus-nro (Kemler-luku):	60
· EMS-numero:	6.1-04
· Segregation groups	Heavy metals and their salts (including their organometallic compounds), lead and its compounds
· Stowage Category	A
· 14.7 Kuljetus irtolastina Marpol-sopimuksen II liitteen ja IBC-säännösten mukaisesti	Ei voida käyttää.
· Kuljetus/lisätietoja:	
· ADR	
· Rajoitetut määrät (LQ)	5 kg
· Poikkeusmäärät (EQ)	Koodi: E1 Enimmäisnettomäärä sisäpakkausta kohti: 30 g Enimmäisnettomäärä ulkopakkausta kohti: 1000 g
· Kuljetuskategoria	2
· Tunnelirajoituskoodi:	E
· IMDG	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN "Model Regulation":	UN 2291 LYIJY-YHDISTE, LIUKENEVA, N.O.S. (LEAD CITRATE, TRIHYDRATE), 6.1, III, YMPÄRISTÖLLE VAARALLINEN

KOHTA 15: Lainsäädäntöä koskevat tiedot

- **15.1 Nimenomaisesti ainetta tai seosta koskevat turvallisuus-, terveys- ja ympäristösäännökset tai -lainsäädäntö**
- **Direktiivi 2012/18/EU**
- **Nimetyt vaaralliset aineet - LIITE I** Aine ei sisälly
- **Seveso-luokka E1** Vaarallisuus vesiympäristölle
- **Soveltamisen vähimmäismäärät (tonneina) alemman tason vaatimukset 100 t**
- **Soveltamisen vähimmäismäärät (tonneina) ylemmän tason vaatimukset 200 t**
- **NEUVOSTON ASETUS (EY) N:o 1907/2006 LIITE XVII** Rajoitusehdot: 30, 63, 72
- **Neuvoston Asetus (EU) N:o 649/2012 Annex I Part 1**
- **Direktiivi 2011/65/EU tiettyjen vaarallisten aineiden käytön rajoittamisesta sähkö- ja elektroniikkalaitteissa - Liite II**
Aine ei sisälly
- **ASETUS (EU) 2019/1148**
- **Liite I - RAJOITETUT RÄJÄHTEIDEN LÄHTÖAINEET (Yläraja-arvo lupien myöntämiseksi 5 artiklan 3 kohdan mukaisesti)**
Aine ei sisälly
- **Liite II - ILMOITETTAVAT RÄJÄHTEIDEN LÄHTÖAINEET** Aine ei sisälly
- **Asetus (EY) N:o 273/2004** huumausaineiden lähtöaineista Aine ei sisälly
- **Asetus (EY) N:o 111/2005 yhteisön ja kolmansien maiden välisen huumausaineiden lähtöaineiden kaupan valvontaa koskevista säännöistä**
Aine ei sisälly

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· **15.2 Kemikaaliturvallisuusarviointi:** Kemikaaliturvallisuusarviointia ei ole tehty.

KOHTA 16: Muut tiedot

Annetut tiedot perustuvat tämänhetkisiin tietoihimme. Ne eivät kuitenkaan anna takuuta tuotteen ominaisuuksista eivätkä aikaansaa sopimuksellista oikeussuhdetta.

· **Lyhenteet ja lyhytnimet:**

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Välitön myrkyllisyys – Katgoria 4

Repr. 1A: Lisääntymiselle vaarallinen – Katgoria 1A

STOT RE 2: Elinkohtainen myrkyllisyys (toistuva altistuminen) – Katgoria 2

Aquatic Acute 1: Vaarallisuus vesiympäristölle - välitön vaara vesiympäristölle – Katgoria 1

Aquatic Chronic 1: Vaarallisuus vesiympäristölle - pitkäaikainen vaara vesiympäristölle – Katgoria 1

Fiche de données de sécurité

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RUBRIQUE 1: Identification de la substance/du mélange et de la société/l'entreprise

- **1.1 Identificateur de produit**
- **Nom du produit:** dicitrate de triplomb
- **Code du produit:** 17800, 17810
- **No CAS:**
512-26-5
- **Numéro CE:**
208-141-1
- **Numéro index:**
082-001-00-6
- **1.2 Utilisations identifiées pertinentes de la substance ou du mélange et utilisations déconseillées**
Pas d'autres informations importantes disponibles.
- **Emploi de la substance / de la préparation** Produits chimiques pour laboratoires
- **1.3 Renseignements concernant le fournisseur de la fiche de données de sécurité**
- **Producteur/fournisseur:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Service chargé des renseignements:** Product safety department
- **1.4 Numéro d'appel d'urgence:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

RUBRIQUE 2: Identification des dangers

- **2.1 Classification de la substance ou du mélange**
- **Classification selon le règlement (CE) n° 1272/2008**



GHS08 danger pour la santé

Repr. 1A H360Df Peut nuire au fœtus. Susceptible de nuire à la fertilité.
STOT RE 2 H373 Risque présumé d'effets graves pour les organes à la suite d'expositions répétées ou d'une exposition prolongée.



GHS09 environnement

Aquatic Acute 1 H400 Très toxique pour les organismes aquatiques.
Aquatic Chronic 1 H410 Très toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.



GHS07

Acute Tox. 4 H302 Nocif en cas d'ingestion.
Acute Tox. 4 H332 Nocif par inhalation.

- **2.2 Éléments d'étiquetage**
- **Étiquetage selon le règlement (CE) n° 1272/2008** La substance est classifiée et étiquetée selon le règlement CLP.

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· Pictogrammes de danger



GHS07 GHS08 GHS09

· Mention d'avertissement Danger

· Mentions de danger

H302+H332 Nocif en cas d'ingestion ou d'inhalation.

H360Df Peut nuire au fœtus. Susceptible de nuire à la fertilité.

H373 Risque présumé d'effets graves pour les organes à la suite d'expositions répétées ou d'une exposition prolongée.

H410 Très toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.

· Conseils de prudence

P260 Ne pas respirer les poussières/fumées/gaz/brouillards/vapeurs/aérosols.

P280 Porter des gants de protection/des vêtements de protection/un équipement de protection des yeux/du visage/une protection auditive.

P301+P312 EN CAS D'INGESTION: Appeler un CENTRE ANTIPOISON/un médecin en cas de malaise.

P304+P340 EN CAS D'INHALATION: transporter la personne à l'extérieur et la maintenir dans une position où elle peut confortablement respirer.

P405 Garder sous clef.

P501 Éliminer le contenu/récipient conformément à la réglementation locale/régionale/nationale/internationale.

· Indications complémentaires:

Contient du plomb. Ne pas utiliser sur les objets susceptibles d'être mâchés ou sucés par des enfants.

· 2.3 Autres dangers

· Résultats des évaluations PBT et vPvB

· **PBT:** Non applicable.

· **vPvB:** Non applicable.

RUBRIQUE 3: Composition/informations sur les composants

· 3.1 Caractérisation chimique: Substances

· No CAS Désignation

512-26-5 dicitrate de triplomb

· Code(s) d'identification

· Numéro CE: 208-141-1

· Numéro index: 082-001-00-6

RUBRIQUE 4: Premiers secours

· 4.1 Description des premiers secours

· Remarques générales:

Les symptômes d'intoxication peuvent apparaître après de nombreuses heures seulement; une surveillance médicale est donc nécessaire au moins 48 heures après un accident.

· Après inhalation:

Donner de l'air frais. Assistance respiratoire si nécessaire. Tenir le malade au chaud. Si les troubles persistent, consulter un médecin.

En cas d'inconscience, coucher et transporter la personne en position latérale stable.

· **Après contact avec la peau:** En règle générale, le produit n'irrite pas la peau.

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- **Après contact avec les yeux:**
Rincer les yeux, sous l'eau courante, pendant plusieurs minutes, en écartant bien les paupières.
- **Après ingestion:** Consulter immédiatement un médecin.
- **4.2 Principaux symptômes et effets, aigus et différés** Pas d'autres informations importantes disponibles.
- **4.3 Indication des éventuels soins médicaux immédiats et traitements particuliers nécessaires**
Pas d'autres informations importantes disponibles.

RUBRIQUE 5: Mesures de lutte contre l'incendie

- **5.1 Moyens d'extinction**
- **Moyens d'extinction:** Adapter les mesures d'extinction d'incendie à l'environnement.
- **5.2 Dangers particuliers résultant de la substance ou du mélange**
Pas d'autres informations importantes disponibles.
- **5.3 Conseils aux pompiers**
- **Équipement spécial de sécurité:** Porter un appareil de protection respiratoire.

RUBRIQUE 6: Mesures à prendre en cas de dispersion accidentelle

- **6.1 Précautions individuelles, équipement de protection et procédures d'urgence** Pas nécessaire.
- **6.2 Précautions pour la protection de l'environnement:**
En cas de pénétration dans les eaux ou les égouts, avertir les autorités compétentes.
Ne pas rejeter dans les canalisations, dans les eaux de surface et dans les nappes d'eau souterraines.
- **6.3 Méthodes et matériel de confinement et de nettoyage:**
Evacuer les matériaux contaminés en tant que déchets conformément au point 13.
Assurer une aération suffisante.
- **6.4 Référence à d'autres rubriques**
Afin d'obtenir des informations pour une manipulation sûre, consulter le chapitre 7.
Afin d'obtenir des informations sur les équipements de protection personnels, consulter le chapitre 8.
Afin d'obtenir des informations sur l'élimination, consulter le chapitre 13.

RUBRIQUE 7: Manipulation et stockage

- **7.1 Précautions à prendre pour une manipulation sans danger**
Bien dépoussiérer.
Veiller à une bonne ventilation/aspiration du poste de travail.
Ouvrir et manipuler les récipients avec précaution.
- **Préventions des incendies et des explosions:** Tenir des appareils de protection respiratoire prêts.
- **7.2 Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités**
- **Stockage:**
- **Exigences concernant les lieux et conteneurs de stockage:** Aucune exigence particulière.
- **Indications concernant le stockage commun:** Pas nécessaire.
- **Autres indications sur les conditions de stockage:** Tenir les emballages hermétiquement fermés.
- **7.3 Utilisation(s) finale(s) particulière(s)** Pas d'autres informations importantes disponibles.

RUBRIQUE 8: Contrôles de l'exposition/protection individuelle

- **8.1 Paramètres de contrôle**
- **Indications complémentaires pour l'agencement des installations techniques:**
Sans autre indication, voir point 7.

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· **Composants présentant des valeurs-seuil à surveiller par poste de travail:**

512-26-5 *dicitrate de triplomb*

VLEP	Valeur à long terme: 0,1 mg/m ³ en Pb
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· **Remarques supplémentaires:**

Le présent document s'appuie sur les listes en vigueur au moment de son élaboration.

· **8.2 Contrôles de l'exposition**

· **Equipement de protection individuel:**

· **Mesures générales de protection et d'hygiène:**

Tenir à l'écart des produits alimentaires, des boissons et de la nourriture pour animaux.

Retirer immédiatement les vêtements souillés ou humectés.

Se laver les mains avant les pauses et en fin de travail.

Conserver à part les vêtements de protection.

· **Protection respiratoire:**

En cas d'exposition faible ou de courte durée, utiliser un filtre respiratoire; en cas d'exposition intense ou durable, utiliser un appareil de respiration indépendant de l'air ambiant.

· **Protection des mains:**

Le matériau des gants doit être imperméable et résistant au produit / à la substance / à la préparation.

À cause du manque de tests, aucune recommandation pour un matériau de gants pour le produit / la préparation / le mélange de produits chimiques ne peut être donnée.

Choix du matériau des gants en fonction des temps de pénétration, du taux de perméabilité et de la dégradation.

· **Matériau des gants**

Le choix de gants appropriés ne dépend pas seulement du matériau, mais également d'autres critères de qualité qui peuvent varier d'un fabricant à l'autre.

· **Temps de pénétration du matériau des gants**

Le temps de pénétration exact est à déterminer par le fabricant des gants de protection et à respecter.

· **Protection des yeux:** Pas nécessaire.

RUBRIQUE 9: Propriétés physiques et chimiques

· **9.1 Informations sur les propriétés physiques et chimiques essentielles**

· **Indications générales**

· **Aspect:**

Forme: Solide

Couleur: Non déterminé.

· **Odeur:** Caractéristique

· **Seuil olfactif:** Non déterminé.

· **valeur du pH:** Non applicable.

· **Changement d'état**

Point de fusion/point de congélation: Non déterminé.

Point initial d'ébullition et intervalle d'ébullition: Non déterminé.

· **Point d'éclair** Non applicable.

· **Inflammabilité (solide, gaz):** La substance n'est pas inflammable.

· **Température de décomposition:** Non déterminé.

· **Température d'auto-inflammabilité:** Non déterminé.

· **Propriétés explosives:** Le produit n'est pas explosif.

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· Limites d'explosion: Inférieure: Supérieure:	<i>Non déterminé.</i> <i>Non déterminé.</i>
· Pression de vapeur:	<i>Non applicable.</i>
· Densité: · Densité relative · Densité de vapeur: · Taux d'évaporation:	<i>Non déterminée.</i> <i>Non déterminé.</i> <i>Non applicable.</i> <i>Non applicable.</i>
· Solubilité dans/miscibilité avec l'eau:	<i>Non déterminé.</i>
· Coefficient de partage: n-octanol/eau:	<i>Non déterminé.</i>
· Viscosité: Dynamique: Cinématique:	<i>Non applicable.</i> <i>Non applicable.</i>
· 9.2 Autres informations	<i>Pas d'autres informations importantes disponibles.</i>

RUBRIQUE 10: Stabilité et réactivité

- **10.1 Réactivité** *Pas d'autres informations importantes disponibles.*
- **10.2 Stabilité chimique**
- **Décomposition thermique/conditions à éviter:** *Pas de décomposition en cas d'usage conforme.*
- **10.3 Possibilité de réactions dangereuses** *Aucune réaction dangereuse connue.*
- **10.4 Conditions à éviter** *Pas d'autres informations importantes disponibles.*
- **10.5 Matières incompatibles:** *Pas d'autres informations importantes disponibles.*
- **10.6 Produits de décomposition dangereux:** *Pas de produits de décomposition dangereux connus*

RUBRIQUE 11: Informations toxicologiques

- **11.1 Informations sur les effets toxicologiques**
- **Toxicité aiguë**
Nocif en cas d'ingestion ou d'inhalation.
- **Effet primaire d'irritation:**
- **Corrosion cutanée/irritation cutanée**
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Lésions oculaires graves/irritation oculaire**
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Sensibilisation respiratoire ou cutanée**
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Indications toxicologiques complémentaires:**
- **Effets CMR (cancérogène, mutagène et toxique pour la reproduction)**
- **Mutagénicité sur les cellules germinales**
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Cancérogénicité** *Compte tenu des données disponibles, les critères de classification ne sont pas remplis.*
- **Toxicité pour la reproduction**
Peut nuire au fœtus. Susceptible de nuire à la fertilité.
- **Toxicité spécifique pour certains organes cibles - exposition unique**
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.

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- **Toxicité spécifique pour certains organes cibles - exposition répétée**
Risque présumé d'effets graves pour les organes à la suite d'expositions répétées ou d'une exposition prolongée.
- **Danger par aspiration** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.

RUBRIQUE 12: Informations écologiques

- **12.1 Toxicité**
- **Toxicité aquatique:** Pas d'autres informations importantes disponibles.
- **12.2 Persistance et dégradabilité** Pas d'autres informations importantes disponibles.
- **12.3 Potentiel de bioaccumulation** Pas d'autres informations importantes disponibles.
- **12.4 Mobilité dans le sol** Pas d'autres informations importantes disponibles.
- **Effets écotoxiques:**
- **Remarque:** Très toxique chez les poissons.
- **Autres indications écologiques:**
- **Indications générales:**
Catégorie de pollution des eaux 3 (D) (Classification propre): très polluant
Ne pas laisser pénétrer dans la nappe phréatique, les eaux ou les canalisations, même pas en petite quantité.
Danger pour l'eau potable dès fuite d'une quantité minime dans le sous-sol.
Dans les eaux, également toxique pour les poissons et le plancton.
Très toxique pour organismes aquatiques.
- **12.5 Résultats des évaluations PBT et VPVB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.
- **12.6 Autres effets néfastes** Pas d'autres informations importantes disponibles.

RUBRIQUE 13: Considérations relatives à l'élimination

- **13.1 Méthodes de traitement des déchets**
- **Recommandation:** Ne doit pas être évacué avec les ordures ménagères. Ne pas laisser pénétrer dans les égouts.
- **Emballages non nettoyés:**
- **Recommandation:** Evacuation conformément aux prescriptions légales.

RUBRIQUE 14: Informations relatives au transport

- | | |
|--|---|
| <ul style="list-style-type: none"> · 14.1 Numéro ONU · ADR, IMDG, IATA | UN2291 |
| <ul style="list-style-type: none"> · 14.2 Désignation officielle de transport de l'ONU · ADR | 2291 COMPOSÉ SOLUBLE DU PLOMB, N.S.A. (dicitrate de triplomb), DANGEREUX POUR L'ENVIRONNEMENT |
| <ul style="list-style-type: none"> · IMDG | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT |
| <ul style="list-style-type: none"> · IATA | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate) |

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· **14.3 Classe(s) de danger pour le transport**

· **ADR, IMDG**



· **Classe** 6.1 Matières toxiques.
 · **Étiquette** 6.1

· **IATA**



· **Class** 6.1 Matières toxiques.
 · **Label** 6.1

· **14.4 Groupe d'emballage**

· **ADR, IMDG, IATA** III

· **14.5 Dangers pour l'environnement:**

· **Marine Pollutant:** Matière dangereuse du point de vue de l'environnement, solide; Marine Pollutant
 · **Marquage spécial (ADR):** Signe conventionnel (poisson et arbre)

· **14.6 Précautions particulières à prendre par l'utilisateur**

· **Numéro d'identification du danger (Indice Kemler):** Attention: Matières toxiques.
 60
 · **No EMS:** 6.1-04
 · **Segregation groups** Heavy metals and their salts (including their organometallic compounds), lead and its compounds
 · **Stowage Category** A

· **14.7 Transport en vrac conformément à l'annexe II de la convention Marpol et au recueil IBC**

Non applicable.

· **Indications complémentaires de transport:**

· **ADR**
 · **Quantités limitées (LQ)** 5 kg
 · **Quantités exceptées (EQ)** Code: E1
 Quantité maximale nette par emballage intérieur: 30 g
 Quantité maximale nette par emballage extérieur: 1000 g
 · **Catégorie de transport** 8
 · **Code de restriction en tunnels** 2
 E

· **IMDG**

· **Limited quantities (LQ)** 5 kg
 · **Excepted quantities (EQ)** Code: E1
 Maximum net quantity per inner packaging: 30 g
 Maximum net quantity per outer packaging: 1000 g

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· "Règlement type" de l'ONU:	UN 2291 COMPOSÉ SOLUBLE DU PLOMB, N.S.A. (DICITRATE DE TRIPLOMB), 6.1, III, DANGEREUX POUR L'ENVIRONNEMENT
------------------------------	--

RUBRIQUE 15: Informations relatives à la réglementation

- **15.1 Réglementations/législation particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement**
- Directive 2012/18/UE
- **Substances dangereuses désignées - ANNEXE I** la substance n'est pas comprise
- **Catégorie SEVESO E1** Danger pour l'environnement aquatique
- **Quantité seuil (tonnes) pour l'application des exigences relatives au seuil bas 100 t**
- **Quantité seuil (tonnes) pour l'application des exigences relatives au seuil haut 200 t**
- **RÈGLEMENT (CE) N° 1907/2006 ANNEXE XVII** Conditions de limitation: 30, 63, 72
- **Règlement (CE) N° 649/2012 Annex I Part 1**
- **Directive 2011/65/UE relative à la limitation de l'utilisation de certaines substances dangereuses dans les équipements électriques et électroniques – Annexe II**
la substance n'est pas comprise
- **RÈGLEMENT (UE) 2019/1148**
- **Annexe I - PRÉCURSEURS D'EXPLOSIFS FAISANT L'OBJET DE RESTRICTIONS (Valeur limite maximale aux fins de l'octroi d'une licence en vertu de l'article 5, paragraphe 3)**
la substance n'est pas comprise
- **Annexe II - PRÉCURSEURS D'EXPLOSIFS DEVANT FAIRE L'OBJET D'UN SIGNALEMENT**
la substance n'est pas comprise
- **Règlement (CE) n° 273/2004 relatif aux précurseurs de drogues** la substance n'est pas comprise
- **Règlement (CE) n° 111/2005 fixant des règles pour la surveillance du commerce des précurseurs des drogues entre la Communauté et les pays tiers**
la substance n'est pas comprise
- **15.2 Évaluation de la sécurité chimique:** Une évaluation de la sécurité chimique n'a pas été réalisée.

RUBRIQUE 16: Autres informations

Ces indications sont fondées sur l'état actuel de nos connaissances, mais ne constituent pas une garantie quant aux propriétés du produit et ne donnent pas lieu à un rapport juridique contractuel.

· **Acronymes et abréviations:**

ADR: Accord relatif au transport international des marchandises dangereuses par route

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Toxicité aiguë – Catégorie 4

Repr. 1A: Toxicité pour la reproduction – Catégorie 1A

STOT RE 2: Toxicité spécifique pour certains organes cibles (exposition répétée) – Catégorie 2

Aquatic Acute 1: Dangers pour le milieu aquatique- toxicité aiguë pour le milieu aquatique – Catégorie 1

Aquatic Chronic 1: Dangers pour le milieu aquatique- toxicité à long terme pour le milieu aquatique – Catégorie 1

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ABSCHNITT 1: Bezeichnung des Stoffs beziehungsweise des Gemischs und des Unternehmens

· 1.1 Produktidentifikator

· **Handelsname:** Blei-II-citrat-3-hydrat

· **Artikelnummer:** 17800, 17810

· **CAS-Nummer:**

512-26-5

· **EG-Nummer:**

208-141-1

· **Indexnummer:**

082-001-00-6

· **1.2 Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird**

Keine weiteren relevanten Informationen verfügbar.

· **Verwendung des Stoffes / des Gemisches** Laborchemikalien

· **1.3 Einzelheiten zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt**

· **Hersteller/Lieferant:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: info@emsdiasum.com

www.emsdiasum.com

Science Services GmbH

Unterhachinger Str. 75

81737 München Germany

Tel: +49(0)89 18 93 668-0

safety@scienceservices.de

Deutschland: +49 (0)89 19240, 24h Giftnotruf Munchen, www.toxinfo.org

Osterreich: +43 1406 43 43, Gesundheit Osterreich GmbH, 24 h

· **Auskunftgebender Bereich:** Product safety department

· **1.4 Notrufnummer:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

ABSCHNITT 2: Mögliche Gefahren

· **2.1 Einstufung des Stoffs oder Gemischs**

· **Einstufung gemäß Verordnung (EG) Nr. 1272/2008**



GHS08 Gesundheitsgefahr

Repr. 1A

H360Df Kann das Kind im Mutterleib schädigen. Kann vermutlich die Fruchtbarkeit beeinträchtigen.

STOT RE 2

H373 Kann die Organe schädigen bei längerer oder wiederholter Exposition.



GHS09 Umwelt

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*Aquatic Acute 1 H400 Sehr giftig für Wasserorganismen.**Aquatic Chronic 1 H410 Sehr giftig für Wasserorganismen mit langfristiger Wirkung.*

GHS07

*Acute Tox. 4 H302 Gesundheitsschädlich bei Verschlucken.**Acute Tox. 4 H332 Gesundheitsschädlich bei Einatmen.*

· 2.2 Kennzeichnungselemente

· Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008

Der Stoff ist gemäß CLP-Verordnung eingestuft und gekennzeichnet.

· Gefahrenpiktogramme



GHS07

GHS08

GHS09

· Signalwort Gefahr

· Gefahrenhinweise

*H302+H332 Gesundheitsschädlich bei Verschlucken oder Einatmen.**H360Df Kann das Kind im Mutterleib schädigen. Kann vermutlich die Fruchtbarkeit beeinträchtigen.**H373 Kann die Organe schädigen bei längerer oder wiederholter Exposition.**H410 Sehr giftig für Wasserorganismen mit langfristiger Wirkung.*

· Sicherheitshinweise

*P260 Staub/Rauch/Gas/Nebel/Dampf/Aerosol nicht einatmen.**P280 Schutzhandschuhe/ Schutzkleidung/ Augenschutz/ Gesichtsschutz/ Gehörschutz tragen.**P301+P312 BEI VERSCHLUCKEN: Bei Unwohlsein GIFTINFORMATIONSZENTRUM/Arzt anrufen.**P304+P340 BEI EINATMEN: Die Person an die frische Luft bringen und für ungehinderte Atmung sorgen.**P405 Unter Verschluss aufbewahren.**P501 Entsorgung des Inhalts / des Behälters gemäß den örtlichen / regionalen / nationalen/ internationalen Vorschriften.*

· Zusätzliche Angaben:

Enthält Blei. Nicht für den Anstrich von Gegenständen verwenden, die von Kindern gekaut oder gelutscht werden könnten.

Nur für gewerbliche Anwender.

· 2.3 Sonstige Gefahren

· Ergebnisse der PBT- und vPvB-Beurteilung

· **PBT:** Nicht anwendbar.

· **vPvB:** Nicht anwendbar.

ABSCHNITT 3: Zusammensetzung/Angaben zu Bestandteilen

· 3.1 Chemische Charakterisierung: Stoffe

· CAS-Nr. Bezeichnung

512-26-5 Blei-II-citrat-3-hydrat

· Identifikationsnummer(n)

· **EG-Nummer:** 208-141-1

· **Indexnummer:** 082-001-00-6

DE

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ABSCHNITT 4: Erste-Hilfe-Maßnahmen

· 4.1 Beschreibung der Erste-Hilfe-Maßnahmen

· Allgemeine Hinweise:

Vergiftungssymptome können erst nach vielen Stunden auftreten, deshalb ärztliche Überwachung mindestens 48 Stunden nach einem Unfall.

· Nach Einatmen:

Frischlufzufuhr, gegebenenfalls Atemspende, Wärme. Bei anhaltenden Beschwerden Arzt konsultieren.

Bei Bewusstlosigkeit Lagerung und Transport in stabiler Seitenlage.

· Nach Hautkontakt: Im allgemeinen ist das Produkt nicht hautreizend.

· Nach Augenkontakt: Augen bei geöffnetem Lidspalt mehrere Minuten mit fließendem Wasser spülen.

· Nach Verschlucken: Sofort Arzt aufsuchen.

· 4.2 Wichtigste akute und verzögert auftretende Symptome und Wirkungen

Keine weiteren relevanten Informationen verfügbar.

· 4.3 Hinweise auf ärztliche Soforthilfe oder Spezialbehandlung

Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 5: Maßnahmen zur Brandbekämpfung

· 5.1 Löschmittel

· Geeignete Löschmittel: Feuerlöschmaßnahmen auf die Umgebung abstimmen.

· 5.2 Besondere vom Stoff oder Gemisch ausgehende Gefahren

Keine weiteren relevanten Informationen verfügbar.

· 5.3 Hinweise für die Brandbekämpfung

· Besondere Schutzausrüstung: Atemschutzgerät anlegen.

ABSCHNITT 6: Maßnahmen bei unbeabsichtigter Freisetzung

· 6.1 Personenbezogene Vorsichtsmaßnahmen, Schutzausrüstungen und in Notfällen anzuwendende Verfahren

Nicht erforderlich.

· 6.2 Umweltschutzmaßnahmen:

Bei Eindringen in Gewässer oder Kanalisation zuständige Behörden benachrichtigen.

Nicht in die Kanalisation/Oberflächenwasser/Grundwasser gelangen lassen.

· 6.3 Methode und Material für Rückhaltung und Reinigung:

Kontaminiertes Material als Abfall nach Abschnitt 13 entsorgen.

Für ausreichende Lüftung sorgen.

· 6.4 Verweis auf andere Abschnitte

Informationen zur sicheren Handhabung siehe Abschnitt 7.

Informationen zur persönlichen Schutzausrüstung siehe Abschnitt 8.

Informationen zur Entsorgung siehe Abschnitt 13.

ABSCHNITT 7: Handhabung und Lagerung

· 7.1 Schutzmaßnahmen zur sicheren Handhabung

Gute Entstaubung.

Für gute Belüftung/Absaugung am Arbeitsplatz sorgen.

Behälter mit Vorsicht öffnen und handhaben.

· Hinweise zum Brand- und Explosionsschutz: Atemschutzgeräte bereithalten.

· 7.2 Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten

· Lagerung:

· Anforderung an Lagerräume und Behälter: Keine besonderen Anforderungen.

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- **Zusammenlagerungshinweise:** Nicht erforderlich.
- **Weitere Angaben zu den Lagerbedingungen:** Behälter dicht geschlossen halten.
- **Lagerklasse:**
- **Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV):** -
- **7.3 Spezifische Endanwendungen** Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 8: Begrenzung und Überwachung der Exposition/Persönliche Schutzausrüstungen

- **8.1 Zu überwachende Parameter**
- **Zusätzliche Hinweise zur Gestaltung technischer Anlagen:** Keine weiteren Angaben, siehe Abschnitt 7.
- **Bestandteile mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten:** Entfällt.
- **Zusätzliche Hinweise:** Als Grundlage dienen die bei der Erstellung gültigen Listen.
- **8.2 Begrenzung und Überwachung der Exposition**
- **Persönliche Schutzausrüstung:**
- **Allgemeine Schutz- und Hygienemaßnahmen:**
 Von Nahrungsmitteln, Getränken und Futtermitteln fernhalten.
 Beschmutzte, getränkte Kleidung sofort ausziehen.
 Vor den Pausen und bei Arbeitsende Hände waschen.
 Getrennte Aufbewahrung der Schutzkleidung.
- **Atemschutz:**
 Bei kurzzeitiger oder geringer Belastung Atemfiltergerät; bei intensiver bzw. längerer Exposition unluftunabhängiges Atemschutzgerät verwenden.
- **Handschutz:**
 Das Handschuhmaterial muss undurchlässig und beständig gegen das Produkt / den Stoff / die Zubereitung sein.
 Aufgrund fehlender Tests kann keine Empfehlung zum Handschuhmaterial für das Produkt / die Zubereitung / das Chemikaliengemisch abgegeben werden.
 Auswahl des Handschuhmaterials unter Beachtung der Durchbruchzeiten, Permeationsraten und der Degradation.
- **Handschuhmaterial**
 Die Auswahl eines geeigneten Handschuhs ist nicht nur vom Material, sondern auch von weiteren Qualitätsmerkmalen abhängig und von Hersteller zu Hersteller unterschiedlich.
- **Durchdringungszeit des Handschuhmaterials**
 Die genaue Durchbruchzeit ist beim Schutzhandschuhhersteller zu erfahren und einzuhalten.
- **Augenschutz:** Nicht erforderlich.

ABSCHNITT 9: Physikalische und chemische Eigenschaften

- **9.1 Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften**
- **Allgemeine Angaben**
- **Aussehen:**

Form:	Fest
Farbe:	Nicht bestimmt.
- **Geruch:** Charakteristisch
- **Geruchsschwelle:** Nicht bestimmt.
- **pH-Wert:** Nicht anwendbar.
- **Zustandsänderung**

Schmelzpunkt/Gefrierpunkt:	Nicht bestimmt.
Siedebeginn und Siedebereich:	Nicht bestimmt.

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· Flammpunkt:	Nicht anwendbar.
· Entzündbarkeit (fest, gasförmig):	Der Stoff ist nicht entzündlich.
· Zersetzungstemperatur:	Nicht bestimmt.
· Selbstentzündungstemperatur:	Nicht bestimmt.
· Explosive Eigenschaften:	Das Produkt ist nicht explosionsgefährlich.
· Explosionsgrenzen:	
Untere:	Nicht bestimmt.
Obere:	Nicht bestimmt.
· Dampfdruck:	Nicht anwendbar.
· Dichte:	Nicht bestimmt.
· Relative Dichte	Nicht bestimmt.
· Dampfdichte	Nicht anwendbar.
· Verdampfungsgeschwindigkeit	Nicht anwendbar.
· Löslichkeit in / Mischbarkeit mit Wasser:	Nicht bestimmt.
· Verteilungskoeffizient: n-Octanol/Wasser:	Nicht bestimmt.
· Viskosität:	
Dynamisch:	Nicht anwendbar.
Kinematisch:	Nicht anwendbar.
· 9.2 Sonstige Angaben	Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 10: Stabilität und Reaktivität

- **10.1 Reaktivität** Keine weiteren relevanten Informationen verfügbar.
- **10.2 Chemische Stabilität**
- **Thermische Zersetzung / zu vermeidende Bedingungen:**
Keine Zersetzung bei bestimmungsgemäßer Verwendung.
- **10.3 Möglichkeit gefährlicher Reaktionen** Keine gefährlichen Reaktionen bekannt.
- **10.4 Zu vermeidende Bedingungen** Keine weiteren relevanten Informationen verfügbar.
- **10.5 Unverträgliche Materialien:** Keine weiteren relevanten Informationen verfügbar.
- **10.6 Gefährliche Zersetzungsprodukte:** Keine gefährlichen Zersetzungsprodukte bekannt.

ABSCHNITT 11: Toxikologische Angaben

- **11.1 Angaben zu toxikologischen Wirkungen**
- **Akute Toxizität**
Gesundheitsschädlich bei Verschlucken oder Einatmen.
- **Primäre Reizwirkung:**
- **Ätz-/Reizwirkung auf die Haut** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Schwere Augenschädigung/-reizung** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Sensibilisierung der Atemwege/Haut** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Zusätzliche toxikologische Hinweise:**
- **CMR-Wirkungen (krebserzeugende, erbgutverändernde und fortpflanzungsgefährdende Wirkung)**
- **Keimzell-Mutagenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Karzinogenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

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- **Reproduktionstoxizität**
Kann das Kind im Mutterleib schädigen. Kann vermutlich die Fruchtbarkeit beeinträchtigen.
- **Spezifische Zielorgan-Toxizität bei einmaliger Exposition**
Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Spezifische Zielorgan-Toxizität bei wiederholter Exposition**
Kann die Organe schädigen bei längerer oder wiederholter Exposition.
- **Aspirationsgefahr** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

ABSCHNITT 12: Umweltbezogene Angaben

- **12.1 Toxizität**
- **Aquatische Toxizität:** Keine weiteren relevanten Informationen verfügbar.
- **12.2 Persistenz und Abbaubarkeit** Keine weiteren relevanten Informationen verfügbar.
- **12.3 Bioakkumulationspotenzial** Keine weiteren relevanten Informationen verfügbar.
- **12.4 Mobilität im Boden** Keine weiteren relevanten Informationen verfügbar.
- **Ökotoxische Wirkungen:**
- **Bemerkung:** Sehr giftig für Fische.
- **Weitere ökologische Hinweise:**
- **Allgemeine Hinweise:**
Wassergefährdungsklasse 3 (Selbsteinstufung): stark wassergefährdend
Nicht in das Grundwasser, in Gewässer oder in die Kanalisation gelangen lassen, auch nicht in kleinen Mengen.
Trinkwassergefährdung bereits beim Auslaufen geringster Mengen in den Untergrund.
In Gewässern auch giftig für Fische und Plankton.
sehr giftig für Wasserorganismen
- **12.5 Ergebnisse der PBT- und vPvB-Beurteilung**
- **PBT:** Nicht anwendbar.
- **vPvB:** Nicht anwendbar.
- **12.6 Andere schädliche Wirkungen** Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 13: Hinweise zur Entsorgung

- **13.1 Verfahren der Abfallbehandlung**
- **Empfehlung:** Darf nicht zusammen mit Hausmüll entsorgt werden. Nicht in die Kanalisation gelangen lassen.
- **Ungereinigte Verpackungen:**
- **Empfehlung:** Entsorgung gemäß den behördlichen Vorschriften.

ABSCHNITT 14: Angaben zum Transport

- | | |
|--|---|
| <ul style="list-style-type: none"> · 14.1 UN-Nummer · ADR, IMDG, IATA | <p>UN2291</p> |
| <ul style="list-style-type: none"> · 14.2 Ordnungsgemäße UN-Versandbezeichnung · ADR · IMDG · IATA | <p>2291 BLEIVERBINDUNG, LÖSLICH, N.A.G. (Blei-II-citrat-3-hydrat), UMWELTGEFÄHRDEND
LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT
LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate)</p> |

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· **14.3 Transportgefahrenklassen**

· **ADR, IMDG**



- **Klasse** 6.1 Giftige Stoffe
 · **Gefahrzettel** 6.1

· **IATA**



- **Class** 6.1 Giftige Stoffe
 · **Label** 6.1

· **14.4 Verpackungsgruppe**

- **ADR, IMDG, IATA** III

· **14.5 Umweltgefahren:**

- **Marine pollutant:** Umweltgefährdender Stoff, fest; Marine Pollutant
 · **Besondere Kennzeichnung (ADR):** Symbol (Fisch und Baum)

· **14.6 Besondere Vorsichtsmaßnahmen für den Verwender**

- **Nummer zur Kennzeichnung der Gefahr (Kemler-Zahl):** Achtung: Giftige Stoffe
 60
 · **EMS-Nummer:** 6.1-04
 · **Segregation groups** Heavy metals and their salts (including their organometallic compounds), lead and its compounds
 · **Stowage Category** A

· **14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens und gemäß IBC-Code** Nicht anwendbar.

· **Transport/weitere Angaben:**

- **ADR**
 · **Begrenzte Menge (LQ)** 5 kg
 · **Freigestellte Mengen (EQ)** Code: E1
 Höchste Nettomenge je Innenverpackung: 30 g
 Höchste Nettomenge je Außenverpackung: 1000 g
 · **Beförderungskategorie** 2
 · **Tunnelbeschränkungscode** E

· **IMDG**

- **Limited quantities (LQ)** 5 kg
 · **Excepted quantities (EQ)** Code: E1
 Maximum net quantity per inner packaging: 30 g
 Maximum net quantity per outer packaging: 1000 g

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· UN "Model Regulation":	UN 2291 BLEIVERBINDUNG, LÖSLICH, N.A.G. (BLEI-II-CITRAT-3-HYDRAT), 6.1, III, UMWELTGEFÄHRDEND
--------------------------	---

ABSCHNITT 15: Rechtsvorschriften

- **15.1 Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften für den Stoff oder das Gemisch**
- Richtlinie 2012/18/EU
- Namentlich aufgeführte gefährliche Stoffe - ANHANG I Der Stoff ist nicht enthalten.
- Seveso-Kategorie E1 Gewässergefährdend
- Mengenschwelle (in Tonnen) für die Anwendung in Betrieben der unteren Klasse 100 t
- Mengenschwelle (in Tonnen) für die Anwendung in Betrieben der oberen Klasse 200 t
- VERORDNUNG (EG) Nr. 1907/2006 ANHANG XVII Beschränkungsbedingungen: 30, 63, 72
- Verordnung (EU) Nr. 649/2012 Annex I Part 1
- Richtlinie 2011/65/EU zur Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten – Anhang II
Der Stoff ist nicht enthalten.
- VERORDNUNG (EU) 2019/1148
- Anhang I - BESCHRÄNKTE AUSGANGSSTOFFE FÜR EXPLOSIVSTOFFE (Oberer Konzentrationsgrenzwert für eine Genehmigung nach Artikel 5 Absatz 3)
Der Stoff ist nicht enthalten.
- Anhang II - MELDEPFLICHTIGE AUSGANGSSTOFFE FÜR EXPLOSIVSTOFFE
Der Stoff ist nicht enthalten.
- Verordnung (EG) Nr. 273/2004 betreffend Drogenausgangsstoffe Der Stoff ist nicht enthalten.
- Verordnung (EG) Nr. 111/2005 zur Festlegung von Vorschriften für die Überwachung des Handels mit Drogenaustauschstoffen zwischen der Gemeinschaft und Drittländern
Der Stoff ist nicht enthalten.
- Nationale Vorschriften:
- Technische Anleitung Luft:

Klasse	Anteil in %
I	100,0
- Wassergefährdungsklasse: WGK 3 (Selbsteinstufung): stark wassergefährdend.
- Sonstige Vorschriften, Beschränkungen und Verbotsverordnungen
Das Produkt unterliegt der Anlage 2 der Chemikalienverbotsverordnung (ChemVerbotsV) - Anforderungen in Bezug auf die Abgabe
- **15.2 Stoffsicherheitsbeurteilung:** Eine Stoffsicherheitsbeurteilung wurde nicht durchgeführt.

ABSCHNITT 16: Sonstige Angaben

Die Angaben stützen sich auf den heutigen Stand unserer Kenntnisse, sie stellen jedoch keine Zusicherung von Produkteigenschaften dar und begründen kein vertragliches Rechtsverhältnis.

- **Abkürzungen und Akronyme:**
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
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)

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*PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 4: Akute Toxizität – Kategorie 4**Repr. 1A: Reproduktionstoxizität – Kategorie 1A**STOT RE 2: Spezifische Zielorgan-Toxizität (wiederholte Exposition) – Kategorie 2**Aquatic Acute 1: Gewässergefährdend - akut gewässergefährdend – Kategorie 1**Aquatic Chronic 1: Gewässergefährdend - langfristig gewässergefährdend – Kategorie 1*

DE

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SEZIONE 1: Identificazione della sostanza o della miscela e della società/impresa

· **1.1 Identificatore del prodotto**

· **Denominazione commerciale:** dicitrato di tripiombo

· **Articolo numero:** 17800, 17810

· **Numero CAS:**

512-26-5

· **Numeri CE:**

208-141-1

· **Numero indice:**

082-001-00-6

· **1.2 Usi identificati pertinenti della sostanza o della miscela e usi sconsigliati**

Non sono disponibili altre informazioni.

· **Utilizzazione della Sostanza / del Preparato** Prodotti chimici per laboratorio

· **1.3 Informazioni sul fornitore della scheda di dati di sicurezza**

· **Produttore/fornitore:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: info@emsdiasum.com

www.emsdiasum.com

Societa Italiana Chimici

Via Rio Nell Ellba 140

00138 Rome, Italy

Tel: 39 06 8800211

Fax: 39 30 06 8815313

Web: www.sichim.com

· **Informazioni fornite da:** Product safety department

· **1.4 Numero telefonico di emergenza:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

SEZIONE 2: Identificazione dei pericoli

· **2.1 Classificazione della sostanza o della miscela**

· **Classificazione secondo il regolamento (CE) n. 1272/2008**



GHS08 pericolo per la salute

Repr. 1A H360Df Può nuocere al feto. Sospettato di nuocere alla fertilità.

STOT RE 2 H373 Può provocare danni agli organi in caso di esposizione prolungata o ripetuta.



GHS09 ambiente

Aquatic Acute 1 H400 Molto tossico per gli organismi acquatici.

Aquatic Chronic 1 H410 Molto tossico per gli organismi acquatici con effetti di lunga durata.



GHS07

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Acute Tox. 4 H302 Nocivo se ingerito.

Acute Tox. 4 H332 Nocivo se inalato.

2.2 Elementi dell'etichetta**Etichettatura secondo il regolamento (CE) n. 1272/2008**

La sostanza è classificata ed etichettata conformemente al regolamento CLP.

Pittogrammi di pericolo

GHS07 GHS08 GHS09

Avvertenza Pericolo**Indicazioni di pericolo**

H302+H332 Nocivo se ingerito o inalato.

H360Df Può nuocere al feto. Sospettato di nuocere alla fertilità.

H373 Può provocare danni agli organi in caso di esposizione prolungata o ripetuta.

H410 Molto tossico per gli organismi acquatici con effetti di lunga durata.

Consigli di prudenza

P260 Non respirare la polvere/i fumi/i gas/la nebbia/i vapori/gli aerosol.

P280 Indossare guanti/indumenti protettivi/proteggere gli occhi/proteggere il viso/proteggere l'udito.

P301+P312 IN CASO DI INGESTIONE: in presenza di malessere contattare un CENTRO ANTIVELENI/un medico.

P304+P340 IN CASO DI INALAZIONE: trasportare l'infortunato all'aria aperta e mantenerlo a riposo in posizione che favorisca la respirazione.

P405 Conservare sotto chiave.

P501 Smaltire il prodotto/recipiente in conformità con le disposizioni locali / regionali / nazionali / internazionali.

Ulteriori dati:

Contiene piombo. Non utilizzare su oggetti che possono essere masticati o succhiati dai bambini.

2.3 Altri pericoli**Risultati della valutazione PBT e vPvB**· **PBT:** Non applicabile.· **vPvB:** Non applicabile.**SEZIONE 3: Composizione/informazioni sugli ingredienti****3.1 Caratteristiche chimiche: Sostanze****Numero CAS**

512-26-5 dicitrato di tripiombo

Numero/i di identificazione· **Numeri CE:** 208-141-1· **Numero indice:** 082-001-00-6**SEZIONE 4: Misure di primo soccorso****4.1 Descrizione delle misure di primo soccorso****Indicazioni generali:**

I sintomi di avvelenamento possono comparire dopo molte ore, per tale motivo è necessaria la sorveglianza di un medico nelle 48 ore successive all'incidente.

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· **Inalazione:**

Portare in zona ben areata, praticare eventualmente la respirazione artificiale, tenere al caldo. Se i disturbi persistono consultare il medico.

Se il soggetto è svenuto provvedere a tenerlo durante il trasporto in posizione stabile su un fianco.

· **Contatto con la pelle:** Generalmente il prodotto non è irritante per la pelle.

· **Contatto con gli occhi:** Lavare con acqua corrente per alcuni minuti tenendo le palpebre ben aperte.

· **Ingestione:** Chiamare subito il medico.

· **4.2 Principali sintomi ed effetti, sia acuti che ritardati** Non sono disponibili altre informazioni.

· **4.3 Indicazione dell'eventuale necessità di consultare immediatamente un medico e di trattamenti speciali**
Non sono disponibili altre informazioni.

SEZIONE 5: Misure antincendio

· **5.1 Mezzi di estinzione**

· **Mezzi di estinzione idonei:** Adottare provvedimenti antiincendio nei dintorni della zona colpita.

· **5.2 Pericoli speciali derivanti dalla sostanza o dalla miscela** Non sono disponibili altre informazioni.

· **5.3 Raccomandazioni per gli addetti all'estinzione degli incendi**

· **Mezzi protettivi specifici:** Indossare il respiratore.

SEZIONE 6: Misure in caso di rilascio accidentale

· **6.1 Precauzioni personali, dispositivi di protezione e procedure in caso di emergenza** Non necessario.

· **6.2 Precauzioni ambientali:**

In caso di infiltrazione nei corpi d'acqua o nelle fognature avvertire le autorità competenti.

Impedire infiltrazioni nella fognatura/nelle acque superficiali/nelle acque freatiche.

· **6.3 Metodi e materiali per il contenimento e per la bonifica:**

Smaltimento del materiale contaminato conformemente al punto 13.

Provvedere ad una sufficiente areazione.

· **6.4 Riferimento ad altre sezioni**

Per informazioni relative ad una manipolazione sicura, vedere capitolo 7.

Per informazioni relative all'equipaggiamento protettivo ad uso personale vedere Capitolo 8.

Per informazioni relative allo smaltimento vedere Capitolo 13.

SEZIONE 7: Manipolazione e immagazzinamento

· **7.1 Precauzioni per la manipolazione sicura**

Accurata captazione delle polveri.

Accurata ventilazione/aspirazione nei luoghi di lavoro.

Aprire e manipolare i recipienti con cautela.

· **Indicazioni in caso di incendio ed esplosione:** Tener pronto il respiratore.

· **7.2 Condizioni per lo stoccaggio sicuro, comprese eventuali incompatibilità**

· **Stoccaggio:**

· **Requisiti dei magazzini e dei recipienti:** Non sono richiesti requisiti particolari.

· **Indicazioni sullo stoccaggio misto:** Non necessario.

· **Ulteriori indicazioni relative alle condizioni di immagazzinamento:** Mantenere i recipienti ermeticamente chiusi.

· **7.3 Usi finali particolari** Non sono disponibili altre informazioni.

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SEZIONE 8: Controllo dell'esposizione/protezione individuale

- **8.1 Parametri di controllo**
- **Ulteriori indicazioni sulla struttura di impianti tecnici:** Nessun dato ulteriore, vedere punto 7.
- **Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:** Non Necessario.
- **Ulteriori indicazioni:** Le liste valide alla data di compilazione sono state usate come base.
- **8.2 Controlli dell'esposizione**
- **Mezzi protettivi individuali:**
- **Norme generali protettive e di igiene del lavoro:**
Tenere lontano da cibo, bevande e foraggi.
Togliere immediatamente gli abiti contaminati.
Lavarsi le mani prima dell'intervallo o a lavoro terminato.
Custodire separatamente l'equipaggiamento protettivo.
- **Maschera protettiva:**
Nelle esposizioni brevi e minime utilizzare la maschera; nelle esposizioni più intense e durature indossare l'autorespiratore.
- **Guanti protettivi:**
Il materiale dei guanti deve essere impermeabile e stabile contro il prodotto/ la sostanza/ la formulazione.
A causa della mancanza di tests non può essere consigliato alcun tipo di materiale per i guanti con cui manipolare il prodotto / la formulazione / la miscela di sostanze chimiche.
Scelta del materiale dei guanti in considerazione dei tempi di passaggio, dei tassi di permeazione e della degradazione.
- **Materiale dei guanti**
La scelta dei guanti adatti non dipende soltanto dal materiale bensì anche da altre caratteristiche di qualità variabili da un produttore a un altro.
- **Tempo di permeazione del materiale dei guanti**
Richiedere dal fornitore dei guanti il tempo di passaggio preciso il quale deve essere rispettato.
- **Occhiali protettivi:** Non necessario.

SEZIONE 9: Proprietà fisiche e chimiche

· 9.1 Informazioni sulle proprietà fisiche e chimiche fondamentali

· Indicazioni generali

· Aspetto:

Forma:	Solido
Colore:	Non definito.
Odore:	Caratteristico
Soglia olfattiva:	Non definito.

· **valori di pH:** Non applicabile.

· Cambiamento di stato

Punto di fusione/punto di congelamento:	Non definito.
Punto di ebollizione iniziale e intervallo di ebollizione:	Non definito.

· **Punto di infiammabilità:** Non applicabile.

· **Infiammabilità (solidi, gas):** Sostanza non infiammabile.

· **Temperatura di decomposizione:** Non definito.

· **Temperatura di autoaccensione:** Non definito.

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· Proprietà esplosive:	Prodotto non esplosivo.
· Limiti di infiammabilità:	
Inferiore:	Non definito.
Superiore:	Non definito.
· Tensione di vapore:	Non applicabile.
· Densità:	Non definito.
· Densità relativa	Non definito.
· Densità di vapore:	Non applicabile.
· Velocità di evaporazione	Non applicabile.
· Solubilità in/Miscibilità con acqua:	Non definito.
· Coefficiente di ripartizione: n-ottanolo/acqua:	Non definito.
· Viscosità:	
Dinamica:	Non applicabile.
Cinematica:	Non applicabile.
· 9.2 Altre informazioni	Non sono disponibili altre informazioni.

SEZIONE 10: Stabilità e reattività

- **10.1 Reattività** Non sono disponibili altre informazioni.
- **10.2 Stabilità chimica**
- **Decomposizione termica/ condizioni da evitare:** Il prodotto non si decompone se utilizzato secondo le norme.
- **10.3 Possibilità di reazioni pericolose** Non sono note reazioni pericolose.
- **10.4 Condizioni da evitare** Non sono disponibili altre informazioni.
- **10.5 Materiali incompatibili:** Non sono disponibili altre informazioni.
- **10.6 Prodotti di decomposizione pericolosi:** Non sono noti prodotti di decomposizione pericolosi.

SEZIONE 11: Informazioni tossicologiche

- **11.1 Informazioni sugli effetti tossicologici**
- **Tossicità acuta**
Nocivo se ingerito o inalato.
- **Irritabilità primaria:**
- **Corrosione/irritazione cutanea** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Lesioni oculari gravi/irritazioni oculari gravi**
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Sensibilizzazione respiratoria o cutanea**
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Ulteriori dati tossicologici:**
- **Effetti CMR (cancerogenicità, mutagenicità e tossicità per la riproduzione)**
- **Mutagenicità delle cellule germinali**
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Cancerogenicità** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità per la riproduzione**
Può nuocere al feto. Sospettato di nuocere alla fertilità.
- **Tossicità specifica per organi bersaglio (STOT) - esposizione singola**
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

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- **Tossicità specifica per organi bersaglio (STOT) - esposizione ripetuta**
Può provocare danni agli organi in caso di esposizione prolungata o ripetuta.
- **Pericolo in caso di aspirazione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

SEZIONE 12: Informazioni ecologiche

- **12.1 Tossicità**
- **Tossicità acquatica:** Non sono disponibili altre informazioni.
- **12.2 Persistenza e degradabilità** Non sono disponibili altre informazioni.
- **12.3 Potenziale di bioaccumulo** Non sono disponibili altre informazioni.
- **12.4 Mobilità nel suolo** Non sono disponibili altre informazioni.
- **Effetti tossici per l'ambiente:**
- **Osservazioni:** Molto tossico per i pesci.
- **Ulteriori indicazioni in materia ambientale:**
- **Ulteriori indicazioni:**
Pericolosità per le acque classe 3 (D) (Autoclassificazione): molto pericoloso
Non immettere nelle acque freatiche, nei corsi d'acqua o nelle fognature, anche in piccole dosi.
Pericolo per le acque potabili anche in caso di perdite nel sottosuolo di quantità minime di prodotto.
Tossico per pesci e plancton.
Molto tossico per gli organismi acquatici
- **12.5 Risultati della valutazione PBT e vPvB**
- **PBT:** Non applicabile.
- **vPvB:** Non applicabile.
- **12.6 Altri effetti avversi** Non sono disponibili altre informazioni.

SEZIONE 13: Considerazioni sullo smaltimento

- **13.1 Metodi di trattamento dei rifiuti**
- **Consigli:** Non smaltire il prodotto insieme ai rifiuti domestici Non immettere nelle fognature.
- **Imballaggi non puliti:**
- **Consigli:** Smaltimento in conformità con le disposizioni amministrative.

SEZIONE 14: Informazioni sul trasporto

- | | |
|---|--|
| · 14.1 Numero ONU | |
| · ADR, IMDG, IATA | UN2291 |
| · 14.2 Nome di spedizione dell'ONU | |
| · ADR | 2291 COMPOSTO SOLUBILE DEL PIOMBO, N.A.S.
(dicitrato di tripiombo), PERICOLOSO PER L'AMBIENTE |
| · IMDG | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate,
Trihydrate), MARINE POLLUTANT |
| · IATA | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate,
Trihydrate) |

(continua a pagina 7)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 30.12.2021

Revisione: 30.12.2021

Denominazione commerciale: dicitrato di tripiombo

(Segue da pagina 6)

· 14.3 Classi di pericolo connesso al trasporto

· ADR, IMDG



· Classe 6.1 Materie tossiche
· Etichetta 6.1

· IATA



· Class 6.1 Materie tossiche
· Label 6.1

· 14.4 Gruppo di imballaggio

· ADR, IMDG, IATA III

· 14.5 Pericoli per l'ambiente:

· Marine pollutant: Materia pericolosa dal punto di vista dell'ambiente, solida;
Marine Pollutant
· Marcatura speciali (ADR): Simbolo (pesce e albero)
Simbolo (pesce e albero)

· 14.6 Precauzioni speciali per gli utilizzatori

· N° identificazione pericolo (Numero Kemler): Attenzione: Materie tossiche
60
· Numero EMS: 6.1-04
· Segregation groups Heavy metals and their salts (including their organometallic
compounds), lead and its compounds
· Stowage Category A

· 14.7 Trasporto di rifiuti secondo l'allegato II di
MARPOL ed il codice IBC

Non applicabile.

· Trasporto/ulteriori indicazioni:

· ADR

· Quantità limitate (LQ) 5 kg
· Quantità esenti (EQ) Codice: E1
Quantità massima netta per imballaggio interno: 30 g
Quantità massima netta per imballaggio esterno: 1000 g
· Categoria di trasporto 2
· Codice di restrizione in galleria E

· IMDG

· Limited quantities (LQ) 5 kg
· Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 g
Maximum net quantity per outer packaging: 1000 g

(continua a pagina 8)

IT

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 30.12.2021

Revisione: 30.12.2021

Denominazione commerciale: dicitrato di tripiombo

(Segue da pagina 7)

· **UN "Model Regulation":** UN 2291 COMPOSTO SOLUBILE DEL PIOMBO, N.A.S. (DICITRATO DI TRIPIOMBO), 6.1, III, PERICOLOSO PER L'AMBIENTE

SEZIONE 15: Informazioni sulla regolamentazione

- **15.1 Disposizioni legislative e regolamentari su salute, sicurezza e ambiente specifiche per la sostanza o la miscela**
- **Direttiva 2012/18/UE**
- **Sostanze pericolose specificate - ALLEGATO I** La sostanza non è contenuta
- **Categoria Seveso E1** Pericoloso per l'ambiente acquatico
- **Quantità limite (tonnellate) ai fini dell'applicazione dei requisiti di soglia inferiore 100 t**
- **Quantità limite (tonnellate) ai fini dell'applicazione dei requisiti di soglia superiore 200 t**
- **REGOLAMENTO (CE) n. 1907/2006 ALLEGATO XVII** Restrizioni: 30, 63, 72
- **Regolamento (UE) N. 649/2012 Annex I Part 1**
- **Direttiva 2011/65/UE sulla restrizione dell'uso di determinate sostanze pericolose nelle apparecchiature elettriche ed elettroniche - Allegato II**
La sostanza non è contenuta
- **REGOLAMENTO (UE) 2019/1148**
- **Allegato I - PRECURSORI DI ESPLOSIVI SOGGETTI A RESTRIZIONI (Valore limite superiore ai fini della concessione di licenze a norma dell'articolo 5, paragrafo 3)**
La sostanza non è contenuta
- **Allegato II - PRECURSORI DI ESPLOSIVI SOGGETTI A SEGNALAZIONE** La sostanza non è contenuta
- **Regolamento (CE) n. 273/2004 relativo ai precursori di droghe** La sostanza non è contenuta
- **Regolamento (CE) N. 111/2005 recante norme per il controllo del commercio dei precursori di droghe tra la Comunità e i paesi terzi**
La sostanza non è contenuta
- **15.2 Valutazione della sicurezza chimica:** Una valutazione della sicurezza chimica non è stata effettuata.

SEZIONE 16: Altre informazioni

I dati sono riportati sulla base delle nostre conoscenze attuali, non rappresentano tuttavia alcuna garanzia delle caratteristiche del prodotto e non motivano alcun rapporto giuridico contrattuale.

- **Abbreviazioni e acronimi:**
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
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Tossicità acuta – Categoria 4
Repr. 1A: Tossicità per la riproduzione – Categoria 1A
STOT RE 2: Tossicità specifica per organi bersaglio (esposizione ripetuta) – Categoria 2
Aquatic Acute 1: Pericoloso per l'ambiente acquatico - pericolo acuto per l'ambiente acquatico – Categoria 1
Aquatic Chronic 1: Pericoloso per l'ambiente acquatico - pericolo a lungo termine per l'ambiente acquatico – Categoria 1

IT

물질안전보건자료 GHS에 따라라따

인쇄일자: 2021.12.30

개정: 2021.12.30

1 화학제품과 회사에 관한 정보

제품제품제명

- **제품명:** Lead Citrate, Trihydrate
- **상품번호:** 17800, 17810
- **번호번호번호**
512-26-5
- **EC 의번호:**
208-141-1

색인색인번호:

082-001-00-6

해당 해당 물질이나 혼합물 관련 권고 및 사용 금지 용도

- **제품의 권고 용도와 사용 생애 제한** Lead Citrate, Trihydrate
- **제품의 권고 용도와 사용 생애 제한** 시험실 화학품
- **안전데이터표(Safety Data Sheet)내 공급업체 권고 사항** 정보
- **제조자/수입자/유통업체 정보**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com

Samchang Commercial Co., Ltd.
Yeo Eui Do
PO Box 1110
Seoul, Korea
Tel: 82 2 703 3040
Fax: 82 2 717 3298

Daedok Science, Co. Ltd.
34141 E10 Korea Advanced Institute of Science
Guseong-Dong, Yuseong-gu, Daejeon,
Korea
Phone: 82 42 710 2091
Fax: 82 42 367 0005
Website: www.labsmro.com

- **추가적인 정보** 화학 제품 가능 duct safety department
- **비상연락 전화번호:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 유해성·위험성

- **순물질 또는 혼합물 분류** 분류



건강에 위험

생식독성 - 구분 1A

H360 태아 또는 생식능력에 손상을 일으킬 수 있음

특정표적장기 독성 - 반복 노출 - 구분 2 H373 장기간 또는 반복노출 되면 장기에 손상을 일으킬 수 있음



환경

(2 쪽에 계속)

물질안전보건자료 GHS에 따라라따

인쇄일자: 2021.12.30

개정: 2021.12.30

제품명: Lead Citrate, Trihydrate

(1 쪽부터계속)

수생환경 유해성 - 급성 - 구분1

H400 수생생물에 매우 유독함

수생환경 유해성 - 만성 - 구분1

H410 장기적인 영향에 의해 수생생물에게 매우 유독함



급성 독성 - 경구 - 구분4

H302 삼키면 유해함

급성 독성 - 흡입 - 구분4

H332 흡입하면 유해함

라벨 표기 요소

라벨 라벨 요소

본 화학물질은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

GHS 그림문자



GHS07



GHS08



GHS09

신호어 위험

유해 위험

삼키거나 흡입하면 유해함.

태아 또는 생식능력에 손상을 일으킬 수 있음

장기간 또는 반복노출 되면 장기에 손상을 일으킬 수 있음

장기적인 영향에 의해 수생생물에게 매우 유독함

예방조치문구

분진·흡·가스·미스트·증기·스프레이를 흡입하지 마시오.

보호장갑·보호의·보안경·안면보호구를 착용하시오.

삼켰을 시: 몸에 이상이 있을 시 독성물질 센터/병원 연락 필요.

흡입하면 신선한 공기가 있는 곳으로 옮기고 호흡하기 쉬운 자세로 안정을 취하시오.

밀봉하여 저장하시오.

(지방/지역/국가/국제 규정에 따라) 에 내용물/용기를 폐기하시오.

기타기타 유해성

· PBT(잔류성, 생물농축성, 생물농축성) 및 vPvB(고 잔류성, 고 생물농축성) 물질로 평가된 결과

· PBT(잔류성, 생물농축성, 생물농축성) 물질로 평가된 결과 없음.

· vPvB(고 잔류성, 고 생물농축성) 물질로 평가된 결과 없음.

3 구성성분의 명칭 및 함유량

· 화학적 특성: 화학물질

· CAS-번호표시

512-26-5 Lead Citrate, Trihydrate

식별식별 번호

· EC 의번호: 208-141-1

색인색인번호: 082-001-00-6

4 응급조치 요령

· 응급조치요령 내용내용

· 일 반적 정보정보

중 독 증 상 은 몇 시 간 이 지 난 뒤 에 발 생 할 수 있 다. 따 라 서 사 고 가 발 생 한 후 에 적 어 도 48 시 간 동 안 은 의 료 진 의 관 찰 을 받 아 야 한 다.

(3 쪽에 계속)

물질안전보건자료 GHS에 따라

인쇄일자: 2021.12.30

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제품명: Lead Citrate, Trihydrate

(3 쪽부터 계속)

8 노출방지 및 개인보호구

· **첨단시설 디자인에 대한 추가정보:** 더 이상 의 자료는 없음. 항 목 7 을 참고하시 오.

통제 ~~통제~~ ~~변수~~ 변수

- 화학물질의 노출기준, 생물학적 노출기준 등: 생략
- 추가정보정보소 할 당시에 유 호 한 목 록을 기초로 사용했다.

노출 ~~노출~~ 통제 통제

개인개인보호구

· **일반적보호조치및위생조치:**

- 식료품, 음료수와 사료로부터 멀리떨어뜨려 놓는다.
- 더러워지거나 음료수가 묻은 옷은 즉시 탈의한다.
- 휴식 전 이 나 작업이 끝날때마다 손을 씻는다.
- 방호복은 따로보관한다.

· **호흡기보호보호**

- 단 시간 또는 경미한 오염의 경우에는 호흡여과기를 사용한다. 심각한 또는 장기간 노출시에는 호흡보호장비를 사용한다.

· **보통보호보호**

- 장갑재질은제품 / 원료 / 조제를투과시키지않아야하고, 내구성있어야한다.
- 테스트를 하지 않았기 때문에 제품 / 조제 / 화학 혼합물에 적합한 장갑재질에 대한 추천이 없다.
- 투과 시간, 침투율과 저하를 고려해서 장갑 재료를 선택한다.

· **장갑의재료**

- 적합한장갑의선택은재질차이뿐아니라품질기준의차이도고려하여이루어져야하고제조업자에따라서도다르게선정되어야한다.

· **장갑재료의투과시간** 정확한관통시간은보호장갑제조자에의하여인지되고, 준수되어야한다.

· **보통보호보호** 없음.

9 물리화학적 특성

기본 ~~기본~~ 물리 ~~물리~~ 화학적 특성 ~~특성~~ 에 대한 ~~대한~~ 정보

· 일반정보
외형외형외형

· 물리상태상태	고체
· 색:	알맞지않다.
· 냄새냄새냄새	특색있는
· 후각역치	알맞지않다.

· pH: 해당사항 없음.

· **상태변화**

· 녹는점/어는점: 맞지않는
초기초기 ~~녹는점~~과 끓는점범위범위 맞지않는

· 인화점: 해당사항 없음.

· 인화성(고체)기체기체 이 제품은 가연성이 없다.

· 분해온도온도 알맞지않다.

· 자기점화: 알맞지않다.

· 폭발위험: 이제품은폭발위험성이없다

· 인화 ~~인화~~ 온도폭발 ~~폭발~~ 위험성 상한 ~~상한~~ 하한
아래로: 알맞지않다.

(5 쪽에 계속)

물질안전보건자료

GHS에 따라 라다

인쇄일자: 2021.12.30

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제품명: Lead Citrate, Trihydrate

(4 쪽부터 계속)

위로위로위로	알맞지않다.
· 중기압:	해당사항 없음.
밀도밀도밀도 비중비중비중	맞지않는다. 알맞지않다.
· 중기밀도:	해당사항 없음.
중발중발중발 속도	해당사항 없음.
· 용해도:	
물:	알맞지않다.
· n 옥탄올/물 분배계수:	알맞지않다.
점도점도점도	
역학성:	해당사항 없음.
동점성:	해당사항 없음.
기타 정보	추가적인 정보가 존재하지 않습니다.

10 안정성 및 반응성

- **반응성** 추가적인 정보가 존재하지 않습니다.
- **화학적 안정성**
- **화학적 안정성** 유해 반응의 가능성 / **피해 야할 조건**에 따라 사용 할 경우 해체는 없다
- **유해 반응 가능성** 위험한 반응으로 알려지지 않았다.
- **피해 야할 조건** 추가적인 정보가 존재하지 않습니다.
- **혼합** 혼합물 중 추가적인 정보가 존재하지 않습니다.
- **유해 분해 물질:** 위험성 있는 분해물들은 알려지지 않았다.

11 독성에 관한 정보

- **독성학적 영향에 대한 정보**
- 급성 **독성** 독성
- **일차적 자극 효과**
- 피부 **피부 자극성** 또는 **자극성:** 무자극
- 심한 **심한 자극성** 또는 **자극성:** 무자극.
- **감각 화:** 민감한 영향이 없는 것으로 알려져 있다.
- 다음 **동물의 잠재적인 효과에 대한 정보**
- **CMR 효과 유발, 유발 현상이성 그라피 독성 독성 독성**
- 생식독성 - 구분 1A

12 환경에 미치는 영향

- 독성독성독성
- **수생독성:** 추가적인 정보가 존재하지 않습니다.
- **지속성 및 분해성** 추가적인 정보가 존재하지 않습니다.
- **환경 시스템에서의 행동:**
- **생물농축 잠재성** 추가적인 정보가 존재하지 않습니다.
- **토양내 이동성** 추가적인 정보가 존재하지 않습니다.
- **생태독성:**
- 의견의견의견류 에 매우 독성임

(6 쪽에 계속)

물질안전보건자료 GHS에 따라라

인쇄일자: 2021.12.30

개정: 2021.12.30

제품명: Lead Citrate, Trihydrate

(5 쪽부터 계속)

· 추가적인 생태학 정보 정보 일반 열병독성 특징

수질오염등급 3 (자체등급분류): 심하게수질오염이된
지하수나, 하천으로또는 하수도망에도달하지않게한다. 역시극소수의양이라도안된다.
지하수로아주미세한양이유입되었을경우엔이미식수오염상태이다
하천에서는역시물고기나플랑크톤게는독성이있다.
물속의유기체에아주독이되는것

- PBT(잔류성, 생물농축성, 물질분해성) 및 vPvB(고 잔류성, 고 생물농축성 물질)에 해당하지 않음.
 - PBT(잔류성, 생물농축성, 물질분해성) 해당사항 없음.
 - vPvB(고 잔류성, 고 생물농축성 물질) 해당사항 없음.
- 기타기타 **부작용** 추가적인 정보가 존재하지 않습니다.

13 폐기시 주의사항

- 폐기물 처리 방법
권고 권고 권고 할 쓰레기와 함께 처리되어서는 안된다. 하수도망으로 유입되어서는 안된다.
- 비위생적 포장 포장
권고 권고 권고 의지침에 입각한 쓰레기 처리.

14 운송에 필요한 정보

유엔 유엔 번호

- ADR, IMDG, IATA UN2291

· 적정적정 지정명

- ADR 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS
- IMDG LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT
- IATA LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate)

교통 교통 위험도

- ADR, IMDG



등급 등급 등급

- 위험도 라벨라벨 6.1 독성물질

- IATA



- Class 6.1 독성물질
- Label 6.1

(7 쪽에 계속)

물질안전보건자료 GHS에 따라 라다

인쇄일자: 2021.12.30

개정: 2021.12.30

제품명: Lead Citrate, Trihydrate

(6 쪽부터 계속)

· 용기등급 · ADR, IMDG, IATA	III
· 환경적 유해물질: · 해양오염물질: 특수 취급 지침(ADR):	이물질은 환경을 오염시킨다; 해양오염 심벌 (물고기와 나무) 심벌 (물고기와 나무)
· 이동지별 특별 취급 조지 위험 유형(ADR) 코드 · E 번호 · Segregation groups · Stowage Category	경고; 독성물질 60 6.1-04 Heavy metals and their salts (including their organometallic compounds), lead and its compounds A
· MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따른 벌크물질 운송 규정	해당사항 없음.
· 운송/취급/처분 정보	
· ADR 한정 양(ADR) 수량 · Excepted quantities (EQ) 운송 규정(ADR) 구분 터널 제한(ADR) 코드	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g 2 E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN 번호/위험성/류제	UN 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (LEAD CITRATE, TRIHYDRATE), 6.1, III, ENVIRONMENTALLY HAZARDOUS

15 법적 규제 현황

- 산업안전보건법에 의해 규제
- 제조/제조자 금지물질: 성분이 포함되어 있지 않다
- 허가대상물질: 성분이 포함되어 있지 않다
- 관리대상유해물질: 성분이 포함되어 있지 않다
- 작업환경측정 대상 유해인자 1B21
- 특수건강검진 대상 유해인자 1B18
- 해당 해당 물질 또는 혼합물에는 대한 안전보건자료(MSDS)를 법률적인 정보가 존재하지 않습니다.
- 화학물질관리법
- 사고대비물질 성분이 포함되어 있지 않다
- 금지물질 성분이 포함되어 있지 않다
- 제한물질 성분이 포함되어 있지 않다
- 유독물질 성분이 포함되어 있다
- 허가물질 성분이 포함되어 있지 않다
- 등록/등록번호/선제대상 화학물질 성분이 포함되어 있지 않다

(8 쪽에 계속)

물질안전보건자료 GHS에 따라라따

인쇄일자: 2021.12.30

개정: 2021.12.30

제품명: Lead Citrate, Trihydrate

(7 쪽부터 계속)

- ‘21년까지 등록하여야 할 압, 들언번이, 생식능력 이상을 일으키거나 일으킬 우려가 있는 ~~있는~~ **존 화학물질** 성분이 포함되어 있지 않다
- **중점관리물 질(제관전) 관련관성분**이 포함되어 있지 않다
- **표1 중점관리물 질(제관전) 관련관성분**이 포함되어 있지 않다
- **표2 중점관리물 질(제관전) 관련관성분**이 포함되어 있지 않다
- **라벨 라벨 라벨 요소**
본 화학물질은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.
- **GHS 그림문자**



- **신호어 위험**
- **유해** ~~유해~~ **위험문구**
삼키거나 흡입하면 유해함.
태아 또는 생식능력에 손상을 일으킬 수 있음
장기간 또는 반복노출 되면 장기에 손상을 일으킬 수 있음
장기적인 영향에 의해 수생생물에게 매우 유독함

- **예방조치문구**
분진·흡·가스·미스트·증기·스프레이를 흡입하지 마시오.
보호장갑·보호의·보안경·안면보호구를 착용하십시오.
삼켰을 시: 몸에 이상이 있을 시 독성물질 센터/병원 연락 필요.
흡입하면 신선한 공기가 있는 곳으로 옮기고 호흡하기 쉬운 자세로 안정을 취하십시오.
밀봉하여 저장하십시오.
(지방/지역/국가/국제 규정에 따라) 에 내용물/용기를 폐기하십시오.
- **화학물질 안전성 평가** ~~평가~~ 화학물질 안전성 평가가 수행되지 않음

16 그 밖의 참고사항

이 보고는 우리 지식에 대한 오늘 날의 상태에 대하여 평가하고 있다, 하지만 이 보고서는 생산 특성에 관한 보증은 기술하지 않았으며 계약적인 법률 관계에 기반을 두고 있지 않다

- **당첨당자당자**
- **최초최초 작성일자:** 2021.12.30
- **개정개정 개정 일자:** 1 / 2021.12.30
- **약어와 두문자어:**

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
 IATA: International Air Transport Association
 EINECS: European Inventory of Existing Commercial Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative

Helaiian Data Keselamatan menurut P.U.(A) 310/2013

Tarikh cetak 30.12.2021

Disemak semula pada 30.12.2021

1 Pengenalan bahan kimia berbahaya dan pembekal

- **Pengenal pasti produk**
- **Nama dagang:** Lead Citrate, Trihydrate
- **Nombor artikel:** 17800, 17810
- **Nombor CAS:**
512-26-5
- **Nombor EC:**
208-141-1
- **Nombor EU:**
082-001-00-6
- **Kegunaan yang disarankan bagi bahan dan sekatan penggunaan** Tiada maklumat lanjut yang diperoleh.
- **Penggunaan bahan/sediaan** Bahan kimia makmal

- **Perincian pembekal risalah data keselamatan**
- **Pengilang/Pembekal:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Maklumat lanjut dapat diperoleh daripada:** Product safety department
- **Nombor telefon kecemasan:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Pengenalan bahaya

- **Pengelasan bahan atau campuran**



Bahaya kesihatan

Pemb. 1A H360 Boleh merosakkan kesuburan atau janin.

STOT RE 2 H373 Boleh menyebabkan kerosakan organ melalui pendedahan berpanjangan atau berulang.



Alam sekitar

Akuatik Akut 1 H400 Sangat toksik kepada hidupan akuatik.

Akuatik Kronik 1 H410 Sangat toksik kepada hidupan akuatik dengan kesan kekal berpanjangan.



Toks. Akut 4 H302 Memudaratkan jika tertelan.

Toks. Akut 4 H332 Memudaratkan jika tersedut.

- **Melabelkan unsur**

- **Unsur label GHS** Bahan ini dikelaskan dan dilabelkan menurut Sistem Terharmoni Global (GHS).

(Bersambung ke halaman 2)

Helaian Data Keselamatan menurut P.U.(A) 310/2013

Tarikh cetak 30.12.2021

Disemak semula pada 30.12.2021

Nama dagang: Lead Citrate, Trihydrate

(Sambungan halaman 1)

· **Piktogram bahaya**



GHS07 GHS08 GHS09

· **Kata isyarat Bahaya**

· **Pernyataan Bahaya**

Memudaratkan jika tertelan atau tersedut.

Boleh merosakkan kesuburan atau janin.

Boleh menyebabkan kerosakan organ melalui pendedahan berpanjangan atau berulang.

Sangat toksik kepada hidupan akuatik dengan kesan kekal berpanjangan.

· **Pernyataan Berjaga-jaga**

Jangan sedut habuk/wasap/gas/ kabus/wap/semburan.

Gunakan kelengkapan pelindung diri seperti yang diperlukan.

JIKA TERTELAN: Hubungi PUSAT RACUN/doktor jika anda rasa tidak sihat.

JIKA TERSEDUT: Pindahkan mangsa ke kawasan berudara segar dan biarkan mangsa dalam keadaan rehat supaya mangsa dapat bernafas dengan selesa.

Simpan di tempat berkunci.

Lupuskan kandungan/bekas menurut peraturan tempatan/wilayah/kebangsaan/antarabangsa.

· **Bahaya lain**

· **Keputusan penilaian PBT dan vPvB**

· **PBT:** Tidak berkenaan

· **vPvB:** Tidak berkenaan

3 Komposisi dan maklumat mengenai ramuan bahan kimia berbahaya

· **Ciri kimia: Bahan**

· **Keterangan No. CAS**

512-26-5 Lead Citrate, Trihydrate

· **Nombor pengenalanpastian**

· **Nombor EC:** 208-141-1

· **Nombor EU:** 082-001-00-6

4 Langkah-langkah pertolongan cemas

· **Keterangan langkah pertolongan cemas**

· **Maklumat am:**

Gejala keracunan boleh berlaku selepas beberapa jam, maka rawatan perubatan hendaklah diberikan sekurang-kurangnya 48 jam selepas kemalangan.

· **Jika tersedut:**

Berikan udara bersih. Jika perlu berikan pernafasan bantuan. Pastikan pesakit dalam keadaan selesa. Rujuk doktor jika gejala berterusan.

Jika mangsa tidak sedarkan diri, letakkan pesakit dengan stabil dalam kedudukan mengiring untuk diangkat.

· **Jika terkena kulit:** Biasanya produk tidak merengsakan kulit.

· **Jika terkena mata:** Bilas mata sambil membukanya di bawah air yang mengalir selama beberapa minit.

· **Jika tertelan:** Segera hubungi doctor.

· **Maklumat untuk doktor:**

· **Gejala dan kesan paling penting, akut dan lewat** Tiada maklumat lanjut yang diperolehi.

(Bersambung ke halaman 3)

Helaiian Data Keselamatan menurut P.U.(A) 310/2013

Tarikh cetak 30.12.2021

Disemak semula pada 30.12.2021

Nama dagang: Lead Citrate, Trihydrate

(Sambungan halaman 2)

- **Arahan bagi apa-apa rawatan perubatan dan rawatan khas yang diperlukan**
Tiada maklumat lanjut yang diperoleh.

5 Langkah-langkah pepadaman kebakaran

- **Bahan pemadam api**
- **Agan pemadam yang sesuai:** Gunakan kaedah pepadaman kebakaran yang sesuai dengan keadaan sekeliling.
- **Bahaya khusus yang timbul daripada bahan atau campuran** Tiada maklumat lanjut yang diperoleh.
- **Panduan kepada pemadam kebakaran**
- **Kelengkapan perlindungan:** Peralatan perlindungan pernafasan mulut.

6 Langkah-langkah pelepasan tidak sengaja

- **Langkah perlindungan diri, kelengkapan pelindung dan prosedur kecemasan** Tidak diperlukan.
- **Langkah perlindungan alam sekitar:**
Hubungi pihak berkuasa berkaitan jika berlaku peresapan masuk ke dalam saluran air atau sistem pembetulan. Jangan biarkannya memasuki pembentung/air permukaan atau tanah.
- **Kaedah dan bahan untuk pembendungan dan pembersihan:**
Lupuskan bahan tercemar sebagai sisa mengikut perkara 13.
Pastikan pengalihudaraan mencukupi.
- **Rujukan ke bahagian lain**
Lihat Bahagian 7 untuk maklumat pengendalian yang selamat.
Lihat Bahagian 8 untuk maklumat kelengkapan perlindungan diri.
Lihat Bahagian 13 untuk maklumat pelupusan.

7 Pengendalian dan penyimpanan

- **Pengendalian:**
- **Langkah perlindungan untuk pengendalian selamat**
Nyahdebu secara menyeluruh.
Pastikan pengalihudaraan/ekzos yang mencukupi di tempat kerja.
Buka dan kendalikan bekas dengan cermat.
- **Maklumat kebakaran dan perlindungan daripada letupan:** Pastikan alat perlindungan pernafasan sentiasa ada.
- **Keadaan untuk penyimpanan selamat, termasuk apa-apa ketakserasian**
- **Penyimpanan:**
- **Keperluan yang mesti dipenuhi oleh bilik stor dan ruang simpanan.** Tiada keperluan khusus.
- **Maklumat penyimpanan di dalam satu tempat penyimpanan yang biasa:** Tidak diperlukan.
- **Maklumat lanjut tentang syarat penyimpanan:** Pastikan bekas sentiasa bertutup rapat.
- **Kegunaan akhir yang khusus** Tiada maklumat lanjut yang diperoleh.

8 Kawalan pendedahan dan perlindungan diri

- **Maklumat tambahan tentang reka bentuk kemudahan teknikal:** Tiada maklumat lanjut, lihat perkara 7.
- **Parameter kawalan**
- **Ramuan dengan nilai had yang memerlukan pemantauan di tempat kerja:** Tidak diperlukan.
- **Maklumat tambahan:** Senarai yang sah semasa pembuatan digunakan sebagai asas.

(Bersambung ke halaman 4)

Helaiian Data Keselamatan menurut P.U.(A) 310/2013

Tarikh cetak 30.12.2021

Disemak semula pada 30.12.2021

Nama dagang: Lead Citrate, Trihydrate

(Sambungan halaman 3)

- **Kawalan pendedahan**
- **Kelengkapan perlindungan diri:**
- **Langkah perlindungan dan kebersihan am:**
*Jauhkan daripada makanan, minuman dan makanan haiwan.
 Segera tanggalkan semua pakaian yang tercemar dan kotor.
 Basuh tangan sebelum berhenti rehat dan apabila kerja selesai.
 Simpan pakaian perlindungan secara berasingan.*
- **Perlindungan pernafasan:**
Jika berlaku pendedahan sekejap atau sedikit pencemaran, gunakan alat penapis pernafasan. Jika berlaku pendedahan yang intensif atau berpanjangan, gunakan alat pernafasan perlindungan serba lengkap.
- **Perlindungan tangan:**
*Bahan sarung tangan hendaklah telus dan kalis terhadap produk/bahan/sediaan.
 Oleh sebab tiada ujian yang dijalankan, maka tiada syor bagi bahan sarung tangan yang boleh diberikan untuk produk/sediaan/campuran kimia.
 Pemilihan bahan sarung tangan berdasarkan waktu penembusan, kadar pembauran dan degradasi.*
- **Bahan sarung tangan**
Pemilihan sarung tangan yang sesuai bukan hanya bergantung pada bahannya, tetapi juga tanda kualiti lainnya serta perbezaannya daripada satu pengeluar dengan pengeluar yang lain.
- **Jangka masa penyerapan bahan sarung tangan**
Waktu kemunculan yang tepat hendaklah diperoleh pengeluar sarung tangan pelindung dan hendaklah dipatuhi.
- **Perlindungan mata:** Tidak diperlukan.

9 Sifat fizikal dan kimia

- | | |
|--|-------------------|
| · Maklumat tentang ciri fizik dan kimia | |
| · Maklumat Am | |
| · Rupa: | |
| Bentuk: | pepejal |
| Warna: | Tidak ditentukan. |
| · Bau: | |
| Ciri | |
| · Ambang bau | |
| Tidak ditentukan. | |
| · Nilai pH: | |
| Tidak berkenaan | |
| · Perubahan pada keadaan | |
| Takat lebur/takat beku | Tidak ditentukan. |
| Takat didih awal dan julat didih | Tidak ditentukan |
| · Takat kilat: | |
| Tidak berkenaan | |
| · Kemudahbakaran (pepejal, gas) | |
| Produk tidak mudah terbakar | |
| · Suhu penguraian: | |
| Tidak ditentukan. | |
| · Suhu pengautocucuhan | |
| Tidak ditentukan. | |
| · Bahaya letupan: | |
| Produk tidak ada bahaya letupan. | |
| · Had letupan : | |
| Bawah: | Tidak ditentukan. |
| Atas: | Tidak ditentukan. |
| · Tekanan wap: | |
| Tidak berkenaan | |
| · Ketumpatan: | |
| Tidak ditentukan. | |
| · Ketumpatan bandingan | |
| Tidak ditentukan. | |
| · Ketumpatan wap | |
| Tidak berkenaan | |

(Bersambung ke halaman 5)

Helaian Data Keselamatan menurut P.U.(A) 310/2013

Tarikh cetak 30.12.2021

Disemak semula pada 30.12.2021

Nama dagang: Lead Citrate, Trihydrate

(Sambungan halaman 4)

· Kadar penyejatan	Tidak berkenaan
· Keterlarutan dalam / Keterlarutcampuran dengan Air:	Tidak ditentukan.
· Pekali sekatan: n-oktanol/air	Tidak ditentukan.
· Kelikatan:	
Dinamik:	Tidak berkenaan
Kinematik:	Tidak berkenaan
· Maklumat lain	Tiada maklumat lanjut yang diperoleh.

10 Kestabilan dan kereaktifan

- **Kereaktifan** Tiada maklumat lanjut yang diperoleh.
- **Kestabilan kimia**
- **Penguraian terma/keadaan yang perlu dielakkan:** Tiada penguraian jika digunakan mengikut spesifikasi.
- **Kemungkinan tindak balas berbahaya** Tiada tindak balas berbahaya yang diketahui.
- **Keadaan yang perlu dielakkan** Tiada maklumat lanjut yang diperoleh.
- **Bahan tidak serasi:** Tiada maklumat lanjut yang diperoleh.
- **Produk penguraian yang berbahaya:** Tiada produk penguraian berbahaya yang diketahui.

11 Maklumat toksikologi

- **Maklumat tentang kesan toksikologi**
- **Ketoksikan akut:**
- **Kesan kerengsaan primer:**
- **Kakisan atau kerengsaan kulit** Tiada kesan merengsa.
- **Kerosakan atau kerengsaan mata yang serius** Tiada kesan kerengsaan.
- **Pemekaan pernafasan / kulit** Tiada kesan pemekaan yang diketahui.
- **Maklumat bagi kumpulan berikut tentang kesan yang mungkin timbul.**
- **Kesan CMR (karsinogen, mutagen dan gangguan kesuburan)**
Pemb. 1A

12 Maklumat ekologi

- **Ketoksikan**
- **Ketoksikan akuatik:** Tiada maklumat lanjut yang diperoleh.
- **Keterusan dan keterdegradasikan** Tiada maklumat lanjut yang diperoleh.
- **Kelakuan dalam sistem alam sekitar:**
- **Potensi bioakumulatif** Tiada maklumat lanjut yang diperoleh.
- **Mobiliti di dalam tanah** Tiada maklumat lanjut yang diperoleh.
- **Kesan ekotoksik:**
- **Catatan:** Sangat toksik kepada ikan
- **Maklumat tambahan ekologi:**
- **Nota am:**
Bahaya air kelas 3 (Peraturan Jerman) (Penilaian sendiri): amat berbahaya kepada air
Jangan biarkan produk memasuki air tanah, saluran air atau sistem pembedungan, walaupun sedikit.
Bahaya kepada air minuman walaupun dalam amat sedikit produk kebocoran yang memasuki tanah
Juga beracun kepada ikan dan plankton dalam jasad air
Sangat toksik kepada organisma akuatik

(Bersambung ke halaman 6)

Helaiian Data Keselamatan menurut P.U.(A) 310/2013

Tarikh cetak 30.12.2021

Disemak semula pada 30.12.2021

Nama dagang: Lead Citrate, Trihydrate




(Sambungan halaman 5)

- **Keputusan penilaian PBT dan vPvB**
- **PBT:** Tidak berkeajaan
- **vPvB:** Tidak berkeajaan
- **Kesan buruk yang lain** Tiada maklumat lanjut yang diperolehi.

13 Maklumat pelupusan

- **Kaedah rawatan sisa**
- **Syor:**
Tidak boleh dilupuskan bersama dengan sampah isi rumah. Jangan biarkan produk memasuki sistem pembentungan.
- **Pembungkusan yang tidak bersih:**
- **Syor:** Pelupusan mestilah dijalankan menurut peraturan rasmi

14 Maklumat pengangkutan

· Nombor UN	
· ADR, IMDG, IATA	UN2291
· Nama penghantaran UN yang betul	
· ADR	2291 LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS
· IMDG	LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT
· IATA	LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate)
· pengangkutan kelas bahaya	
· ADR, IMDG	
	
	
· Kelas	6.1 Bahan toksik.
· Label	6.1
· IATA	
	
· Class	6.1 Bahan toksik.
· Label	6.1
· Kumpulan pembungkusan	
· ADR, IMDG, IATA	III
· Hazard persekitaran:	Bahan ini berbahaya kepada alam sekitar; Bahan cemar marin
· Bahan cemar marin:	Tanda (ikan dan pokok)
· Pelabelan khas (ADR):	Tanda (ikan dan pokok)

(Bersambung ke halaman 7)

Helaian Data Keselamatan menurut P.U.(A) 310/2013

Tarikh cetak 30.12.2021

Disemak semula pada 30.12.2021

Nama dagang: Lead Citrate, Trihydrate

(Sambungan halaman 6)

<ul style="list-style-type: none"> · Langkah perlindungan khas untuk pengguna · Kod bahaya (Kemler): · Nombor EMS: · Segregation groups · Stowage Category 	<p>Amaran: Bahan toksik. 60 6.1-04 Heavy metals and their salts (including their organometallic compounds), lead and its compounds A</p>
<ul style="list-style-type: none"> · Pengangkutan dalam pukal menurut Lampiran II MARPOL73/78 dan Kod IBC 	Tidak berkenaan
<ul style="list-style-type: none"> · Pengangkutan/Maklumat Tambahan: 	
<ul style="list-style-type: none"> · ADR · Excepted quantities (EQ) 	<p>Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g</p>
<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) 	<p>5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g</p>
<ul style="list-style-type: none"> · "Peraturan Model" UN: 	UN 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (LEAD CITRATE, TRIHYDRATE), 6.1, III, ENVIRONMENTALLY HAZARDOUS

15 Maklumat pengawalseliaan

- **Peraturan/undang-undang keselamatan, kesihatan dan persekitaran khusus untuk bahan atau campuran tersebut**
Tiada maklumat lanjut yang diperoleh.
- **Senarai Rujukan Bahan Berbahaya Alam Sekitar Bahan disenaraikan.**
- **Unsur label GHS** Bahan ini dikelaskan dan dilabelkan menurut Sistem Terharmoni Global (GHS).
- **Piktogram hazard**



GHS07 GHS08 GHS09

- **Perkataan isyarat Bahaya**
- **Pernyataan hazard**
Memudaratkan jika tertelan atau tersedut.
Boleh merosakkan kesuburan atau janin.
Boleh menyebabkan kerosakan organ melalui pendedahan berpanjangan atau berulang.
Sangat toksik kepada hidupan akuatik dengan kesan kekal berpanjangan.
- **Pernyataan langkah perlindungan**
Jangan sedut habuk/wasap/gas/ kabus/wap/semburan.
Gunakan kelengkapan pelindung diri seperti yang diperlukan.
JIKA TERTELAN: Hubungi PUSAT RACUN/doktor jika anda rasa tidak sihat.
JIKA TERSEDUT: Pindahkan mangsa ke kawasan berudara segar dan biarkan mangsa dalam keadaan rehat supaya mangsa dapat bernafas dengan selesa.
Simpan di tempat berkunci.

(Bersambung ke halaman 8)

Helaiian Data Keselamatan menurut P.U.(A) 310/2013

Tarikh cetak 30.12.2021

Disemak semula pada 30.12.2021

Nama dagang: Lead Citrate, Trihydrate

(Sambungan halaman 7)

Lupuskan kandungan/bekas menurut peraturan tempatan/wilayah/kebangsaan/antarabangsa.
 · **Penilaian keselamatan bahan kimia:** Penilaian Keselamatan Bahan Kimia belum dilakukan.

16 Maklumat lain

Maklumat ini berdasarkan maklumat kami yang terkini. Walau bagaimanapun, ini tidak akan menjadi jaminan bagi apa-apa ciri produk yang khusus dan tidak akan mewujudkan hubungan kontraktual yang sah dari segi undang-undang.

· **Hubungi:**

· **Singkatan dan akronim:**

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

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Toks. Akut 4: Ketoksikan akut – Kategori 4

Pemb. IA: Ketoksikan pembiakan – Kategori IA

STOT RE 2: Ketoksikan organ sasaran khusus (pendedahan berulang) – Kategori 2

Akuatik Akut 1: Berbahaya kepada persekitaran akuatik - bahaya akut – Kategori 1

Akuatik Kronik 1: Berbahaya kepada persekitaran akuatik - bahaya kronik – Kategori 1

MY

安全資料表

據根據危險性化學品標示及通識規則

打印日期 2021.12.30

在 2021.12.30 審核

1 化學品與廠商資料

- **產品識別者**
- **化學品中文名稱/名稱/俗名/商品名:** Lead Citrate, Trihydrate
- **商品編號:** 17800, 17810
- **編號/編號編號**
512-26-5
- **歐盟編號:**
208-141-1
- **歐盟編號:**
082-001-00-6
- **相應純物質或者混合物的相關下位用途及禁止用途** 無相關詳細資料。
- **物質或混合物的用途** 實驗室化學物
- **安全技術說明書內供應商詳細信息**
- **企業名稱:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **可獲取更多資料的部門:** Product safety department
- **緊急聯繫電話號碼:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 危害辨識資料

- **緊急情況概述:**

未決定。固體，吞食或吸入有害。可能對生育能力或對胎兒造成傷害。長期或重複暴露可能對器官造成傷害。對水生生物毒性非常大並具有長期持續影響。

- **GHS危險性類別**



健康危險

生殖毒性物質 第1A級 H360 可能對生育能力或對胎兒造成傷害
 特定標的器官系統毒性物質(重複暴露) 第2級 H373 長期或重複暴露可能對器官造成傷害



環境

水環境之危害物質(急毒性) 第1級 H400 對水生生物毒性非常大
 水環境之危害物質(慢毒性) 第1級 H410 對水生生物毒性非常大並具有長期持續影響



急毒性物質(吞食) 第4級 H302 吞食有害
 急毒性物質(吸入) 第4級 H332 吸入有害

- **標籤要素**

- **GHS標籤元素** 本化學物質根據化學物質分類及標記全球協調制度(GHS)進行了分類及標記。

(在 2 頁繼續)

安全資料表

據根根據據性化學品標示及通識規則

打印日期 2021.12.30

在 2021.12.30 審核

化學品中文名稱名稱：化學品俗名或商品名： Lead Citrate, Trihydrate

(在 1 頁繼續)

象形圖



GHS07 GHS08 GHS09

警示詞 危險

危險性說明

- 吞食或吸入有害。
- 可能對生育能力或對胎兒造成傷害
- 長期或重複暴露可能對器官造成傷害
- 對水生生物毒性非常大並具有長期持續影響

防範說明

預防措施

- 不要吸入粉塵/煙煙/氣體/霧滴/蒸氣/噴霧。
- 穿戴防護手套/防護衣物/眼睛防護具/臉部防護具。

應急措施

- 如誤吞咽：如感覺不適，呼叫解毒中心/醫生
- 若不慎吸入：將患者移到空氣新鮮處，保持呼吸舒適的體位休息。

貯存貯存貯存

- 加鎖存放。

處置處置處置

- 按照地方/區域/國家/國際法規處理內容物之廢棄/容器。

其他有害性

- PBT(殘留性、生物濃縮性、毒性物質) 及 vPvB(高殘留性、高生物濃縮性物質)評價結果
- PBT(殘留性、生物濃縮性、毒性物質) 不適用的
- vPvB(高殘留性、高生物濃縮性物質): 不適用的

3 成分辨識資料

純品純品純品

- CAS號 化學名, 通用名
512-26-5 Lead Citrate, Trihydrate
- 鑒別編號：
- 歐盟編號: 208-141-1
- 歐盟編號: 082-001-00-6

4 急救措施

應急措施要領

- 總說明: 中毒的症狀可能會在幾個小時以後才出現;因此在發生事故之後起碼要有 48 小時的醫療觀察。

吸入吸入吸入

- 供給新鮮空氣. 如有需要,提供人工呼吸. 讓病人保暖. 如果症狀持續則詢問醫生.
- 萬一病人不清醒時,請讓病人側躺以便移動.

皮膚接觸: 一般的產品不會刺激皮膚.

眼睛接觸: 張開眼睛在流水下沖洗數分鐘.

食入食入食入

- 立即上召喚醫生.
- 給醫生的資料:
- 最重要的急慢性症狀及其影響 無相關詳細資料。

(在 3 頁繼續)

安全資料表

據根據據據性化學品標示及通識規則

打印日期 2021.12.30

在 2021.12.30 審核

化學品中文名稱名稱名稱化學品俗名或商品名：Lead Citrate, Trihydrate

(在 2 頁繼續)

- 需要及時的醫療處理及特別處理的症狀 無相關詳細資料。

5 滅火措施

- 滅火方法
- 滅火的方法和滅火劑: 使用適合四周環境的滅火措施.
- 特別危險性 無相關詳細資料。
- 特殊滅火方法
- 消防人員特殊的防護裝備: 口腔呼吸保護裝置.

6 洩漏處理方法

- 保護措施 沒有要求.
- 環境保護措施:
 - 如果滲入了水源或汗水系統,請通知有關當局.
 - 切勿讓其進入下水道/水面或地下水.
- 密封及淨化方法和材料:
 - 根據第 13 條條款棄置受汙染物.
 - 確保有足夠的通風裝置.
- 參照其他部分
 - 有關安全處理的資料請參閱第 7 節.
 - 有關個人保護裝備的資料請參閱第 8 節.
 - 有關棄置的資料請參閱第 13 節.

7 安全處置與儲存方法

- 操作處置
- 儲存 儲存儲存
 - 徹底除塵.
 - 確保工作間有良好的通風/排氣裝置.
 - 小心打開及處理貯藏器.
- 有關火災及防止爆炸的資料: 提供呼吸保護裝置.
- 混合危險性等安全儲存條件
- 儲存 儲存儲存
 - 儲存庫和容器須要達到的要求: 沒有特別的要求.
 - 有關使用一個普通的儲存設施來儲存的資料: 不需要.
 - 有關儲存條件的更多資料: 將容器密封.
 - 具體的最終用戶 無相關詳細資料.

8 暴露預防措施

- 工程控制方法: 沒有進一步數據,見第 7 項.
- 控制變數
- 在工作場需要監控的限值成分 不要求.
- 額外的資料: 制作期間有效的清單將作為基礎來使用.
- 遺漏控制
- 個人防護設備:
 - 一般保護和衛生措施:
 - 遠離食品、飲料和飼料.

(在 4 頁繼續)

安全資料表

據根據據據性化學品標示及通識規則

打印日期 2021.12.30

在 2021.12.30 審核

化學品中文名稱名稱名稱化學品俗名或商品名：Lead Citrate, Trihydrate

(在 3 頁繼續)

立即除去所有的不潔的和被汙染的衣服。

在休息之前和工作完畢後請清洗雙手。

分開儲存保護性衣服。

·呼吸系統防護:

如果會短暫接觸或在低汙染的情況下,請使用呼吸過濾裝置. 如果會深入或較長時間接觸,請使用獨立的呼吸保護裝置.

·手防護:

手套的物料必須是不滲透性的,且能抵抗該產品/物質/添加劑.

基於缺乏測試,對於產品/制劑/化學混合物,並不會提供手套材料的建議

選擇手套材料時,請注意材料的滲透時間,滲濾率和降解參數

·**手套材料** 選擇合適的手套不單取決於材料,亦取決於質量特征,以及來自哪一間生產廠家

·**滲入手套材料的時間** 請向勞保手套生產廠家獲取準確的破裂時間並觀察實際的破裂時間

·**眼睛防護:** 不要求

9 物理及化學性質

· 有關基本物理及化學特性的資訊	
· 一般說明	
外觀外觀外觀	固體
形狀形狀形狀	未決定.
顏色顏色顏色	有特性的
氣味氣味氣味	未決定.
· 嗅覺閾限	
· pH值:	不適用的
· 條件的更改	
熔點熔點熔點	未確定的
沸點沸點沸點	未確定的
閃點閃點閃點	不適用的
· 可燃性 (固體、氣體): 該產品是不可燃的	
· 分解溫度:	未決定.
· 自燃溫度:	未決定.
· 爆炸的危險性:	該產品並沒有爆炸的危險
· 爆炸極限:	
較低較低較低	未決定.
較高較高較高	未決定.
· 蒸氣壓:	不適用的
密度密度密度	未決定的
· 相對密度	未決定.
· 蒸氣密度	不適用的
· 蒸發速率	不適用的
· 溶解性	
水:	未決定.
辛醇辛醇辛醇	未決定.
· 分配係數:	
黏性黏性黏性	
動態:	不適用的

(在 5 頁繼續)

安全資料表

據根據據據性化學品標示及通識規則

打印日期 2021.12.30

在 2021.12.30 審核

化學品中文名稱名稱名稱化學品俗名或商品名：Lead Citrate, Trihydrate

(在 4 頁繼續)

運動學的： 不適用的

其他資訊 無相關詳細資料。

10 安定性及反應性

應度應性應相關詳細資料。

穩定穩定穩定

分解分解分解免的情況：如果遵照規格使用則不會分解。

有害有害有害應可能性 未有已知的危險反應。

避應避免避條件 無相關詳細資料。

- 不相容的物質：無相關詳細資料。
- 危險的分解產物：未知有危險的分解產品。

11 毒性資料

對毒性學影響的資訊

急性毒性：

要的調劑刺激影響：

皮膚皮膚皮膚有刺激性影響。

在眼睛上面上面有刺激的影響。

致敏致敏致敏作用有已知的敏化影響。

對以對以對組別可能產生影響的資料：

- 作用作用作用致導致導致變變變對生殖系統有害)
- 生殖毒性物質 第1A級

12 生態資料

毒態毒性毒性

水生毒性：無相關詳細資料。

持久性和持久性降解性降解相關詳細資料。

環境系統習性：

潛在的累積累積累積相關詳細資料。

土壤土壤動動動性動相關詳細資料。

生態毒性的影響：

備注：對魚類有劇毒

額外的生態學資料：

括總括注解注

水危害級別 3 (德國規例) (通過名單進行自我評估)：對水是極其危害的

即使是小量，不要讓該產品接觸地下水、水道或污水系統。

即使是極其小量的產品滲入地下也會對飲用水造成危險。

對水體中的魚和浮遊生物也有毒害。

對水中的有機物有劇毒。

·PBT(殘留性、生物濃縮性、毒性物質) 及 vPvB(高殘留性、高生物濃縮性物質)評價結果

·PBT(殘留性、生物濃縮性、毒性物質) 不適用的

·vPvB(高殘留性、高生物濃縮性物質)：不適用的

其他其他其他用無相關詳細資料。

-TW

(在 6 頁繼續)

安全資料表

據根據據據性化學品標示及通識規則

打印日期 2021.12.30

在 2021.12.30 審核

化學品中文名稱名稱名稱化學品俗名或商品名：Lead Citrate, Trihydrate

(在 5 頁繼續)

13 廢棄處置方法

廢棄處置方法

建議建議建議能將該產品和家居垃圾一起丟棄. 不要讓該產品接觸汗水系統.

· 受污染的容器和包裝:

建議建議建議須根據官方的規章來丟棄.

14 運送資料

聯合聯合圖危險貨物編號(UN號)

· ADR, IMDG, IATA UN2291

適當適當罐體名

· ADR 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), 環境有害

· IMDG LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT

· IATA LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate)

運輸運輸危險等級

· ADR, IMDG



· 級別

6.1 毒性物質

標籤標籤標籤

6.1

· IATA



· Class

6.1 毒性物質

· Label

6.1

· 包裝組別

· ADR, IMDG, IATA III

· 環境危害

該原料對環境有害; 海運汙染物質

· 海運海運物質物質

象徵符號 (魚和樹)

· 具體標記 (ADR):

象徵符號 (魚和樹)

· 用戶特別預防措施

警告: 毒性物質

· 危險編碼:

60

· 環境碼碼碼碼

6.1-04

· Segregation groups

Heavy metals and their salts (including their organometallic compounds), lead and its compounds

· Stowage Category

A

(在 7 頁繼續)

安全資料表

據根據據據性化學品標示及通識規則

打印日期 2021.12.30

在 2021.12.30 審核

化學品中文名稱名稱名稱化學品俗名或商品名：Lead Citrate, Trihydrate

(在 6 頁繼續)

· MARPOL73/78(針對船舶引起的海洋污染預防協約
 附件書根據根據國際國際國際貨物編碼)值大量大量
 運送運送運送 不適用

運輸運輸運輸的資料:

· ADR · Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN "標準規定":	UN 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (LEAD CITRATE, TRIHYDRATE), 6.1, III, 對環境有害

15 法規資料

- 對相應純物質或者混合物的安全、保健及環境法規/法律 無相關詳細資料。
- 優先管理化學品之指定及運作管理辦法
- 附表附表對於未滿十八歲區域區域後未滿女年女性變工具危害性之化學品 沒有列出物質。
- 第二第二條第二款第一目 沒有列出物質。
- 第二第二條第二款第二目 沒有列出物質。
- 新化學物質及既有化學物質資料登錄辦法 英 沒有列出物質。
- 國現國現化學物質名錄 沒有列出物質。
- TCSCA
- 列管編管編管編管 列出物質。
- 毒性分類 沒有列出物質。
- 管制濃度 (w/w%) 沒有列出物質。
- 大量運作基準基公斤) 沒有列出物質。
- 新化學物質及既有化學物質資料登錄辦法, 附表六 沒有列出物質。
- TCSI - Taiwan Chemical Substance Inventory 有列出物質。
- GHS標籤元素 本化學物質根據化學物質分類及標記全球協調制度(GHS)進行了分類及標記。
- 象形圖



GHS07 GHS08 GHS09

警示警示警告危險

- 危險性說明
 - 吞食或吸入有害。
 - 可能對生育能力或對胎兒造成傷害
 - 長期或重複暴露可能對器官造成傷害
 - 對水生生物毒性非常大並具有長期持續影響
- 防範說明
- 預防措施
 - 不要吸入粉塵/煙煙/氣體/霧滴/蒸氣/噴霧。

(在 8 頁繼續)

安全資料表

據根據據據性化學品標示及通識規則

打印日期 2021.12.30

在 2021.12.30 審核

化學品中文名稱名稱名稱化學品俗名或商品名：Lead Citrate, Trihydrate

(在 7 頁繼續)

穿戴防護手套/防護衣物/眼睛防護具/臉部防護具。

應急措施

如誤吞咽：如感覺不適，呼叫解毒中心/醫生

若不慎吸入：將患者移到空氣新鮮處，保持呼吸舒適的體位休息。

貯存貯存貯存

加鎖存放。

處置處置處置

按照地方/區域/國家/國際法規處理內容物之廢棄/容器。

· **化學物質安全性評價**: 尚未進行化學物質安全性評價

16 其他資料

該資料是基於我們目前的知識。然而,這並不構成對任何特定產品特性的擔保並且不建立一個法律上有效的合同關係。

· **聯絡:**

· **縮寫:**

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

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: 持久性生物累積性有毒物質

vPvB: very Persistent and very Bioaccumulative

急毒性物質(吞食) 第4級: Acute toxicity – Category 4

生殖毒性物質 第1A級: Reproductive toxicity – Category 1A

特定標的器官系統毒性物質(重複暴露) 第2級: Specific target organ toxicity (repeated exposure) – Category 2

水環境之危害物質(急性) 第1級: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

水環境之危害物質(慢性) 第1級: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

-TW-

Sikkerhetsdatablad

iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 30.12.2021

revidert den: 30.12.2021

Avsnitt 1: Identifikasjon av stoffet/stoffblandingen og av selskapet/foretaket

- **1.1 Produktidentifikator**
- **Handelsnavn:** Lead Citrate, Trihydrate
- **Artikkelnummer:** 17800, 17810
- **CAS-nummer:**
512-26-5
- **EC nummer:**
208-141-1
- **EF-nummer:**
082-001-00-6
- **1.2 Relevante identifiserte bruksområder for stoffet eller stoffblandingen og bruk som frarådes**
Ikke noe mer relevant informasjon tilgjengelig.
- **Bruk av stoffet/ tilberedning** laboratoriekjemikalier
- **1.3 Opplysninger om leverandøren av sikkerhetsdatabladet**
- **Produsent/leverandør:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Avdeling for nærmere informasjon:** Product safety department
- **1.4 Nødtelefonnummer**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

Avsnitt 2: Fareidentifikasjon

- **2.1 Klassifisering av stoffet eller stoffblandingen**
- **Klassifisering i henhold til EC-forskrift nr.1272/2008**



GHS08 Helsefare

Repr. 1A H360Df Kan gi fosterskader. Mistenkes for å kunne skade forplantningsevnen.
STOT RE 2 H373 Kan forårsake organskader ved langvarig eller gjentatt eksponering.



GHS09 Miljø

Aquatic Acute 1 H400 Meget giftig for liv i vann.
Aquatic Chronic 1 H410 Meget giftig, med langtidsvirkning, for liv i vann.



GHS07

Acute Tox. 4 H302 Farlig ved svelging.
Acute Tox. 4 H332 Farlig ved innånding.

- **2.2 Merkingselementer**
- **Merking iht. bestemmelse (EC) Nr. 1272/2008**
Substansen er klassifisert og merket i henhold til CLP-forordningen.

(fortsatt på side 2)

Sikkerhetsdatablad

iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 30.12.2021

revidert den: 30.12.2021

Handelsnavn: Lead Citrate, Trihydrate

(fortsatt fra side 1)

· Farepiktogrammer



GHS07 GHS08 GHS09

· Varselord Fare

· Faresetninger

H302+H332 Farlig ved svelging eller innånding.

H360Df Kan gi fosterskader. Mistenkes for å kunne skade forplantningsevnen.

H373 Kan forårsake organskader ved langvarig eller gjentatt eksponering.

H410 Meget giftig, med langtidsvirkning, for liv i vann.

· Sikkerhetssetninger

P260 Ikke innånd støv/røyk/gass/tåke/damp/aerosoler.

P280 Benytt vernehansker /verneklær/øyevern/ansiktsvern.

P301+P312 VED SVELGING: Kontakt et GIFTINFORMASJONSSENTER/en lege ved ubehag.

P304+P340 VED INNÅNDING: Flytt personen til frisk luft og sørg for at vedkommende har en stilling som letter åndedrettet.

P405 Oppbevares innelåst.

P501 Innholdet / emballasjen skal avhendes i henhold til de lokale / regionale / nasjonale / internasjonale forskrifter.

· Ytterligere informasjoner:

Inneholder bly. Må ikke brukes på gjenstander som barn vil kunne tygge eller suge på.

· 2.3 Andre farer

· Resultater av PBT- og vPvB-vurdering

· **PBT:** Ikke brukbar.

· **vPvB:** Ikke brukbar.

Avsnitt 3: Sammensetning/opplysninger om bestanddeler

· 3.1 Kjemisk karakterisering: Stoffer

· CAS-nr. betegnelse

512-26-5 Lead Citrate, Trihydrate

· Identifikasjonsnummer(numre)

· **EC nummer:** 208-141-1

· **EF-nummer:** 082-001-00-6

Avsnitt 4: Førstehjelpstiltak

· 4.1 Beskrivelse av førstehjelpstiltak

· Generelle informasjoner:

Forgiftningssymptomer kan også oppstå etter mange timer. Personer må derfor ha legetilsyn i minst 48 timer etter en ulykke.

· Etter innånding:

Frisklufttilførsel, eventuelt kunstig åndedrett, varme. Ved fortsatt besvær må lege tilkalles.

Ved bevisstløshet lagring og transport i stabil sidestilling.

· **Etter hudkontakt:** Vanligvis irriterer produktet ikke huden.

· **Etter øyekontakt:** Skyll øynene med åpne øyenlokk i flere minutter under rennende vann.

· **Etter svelging:** Søk lege straks.

· 4.2 De viktigste symptomene og virkningene, både akutte og forsinkede

Ikke noe mer relevant informasjon tilgjengelig.

(fortsatt på side 3)

Sikkerhetsdatablad

iflg. forordning (EF) nr. 1907/2006, Artikkel 31

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(fortsatt fra side 2)

- **4.3 Angivelse av om umiddelbar legehjelp og spesialbehandling er nødvendig**
Ikke noe mer relevant informasjon tilgjengelig.

Avsnitt 5: Brannslukkingstiltak

- **5.1 Slokkingsmidler**
- **Egnede slukningsmidler:** Brannslukningstiltak tilpasses omgivelsene.
- **5.2 Særlige farer knyttet til stoffet eller stoffblandingen** Ikke noe mer relevant informasjon tilgjengelig.
- **5.3 Råd til brannmannskaper**
- **Spesielt verneutstyr:** Ta på egnet åndedrettsbeskyttelse.

Avsnitt 6: Tiltak ved utilsiktede utslipp

- **6.1 Personlige forsiktighetsregler, personlig verneutstyr og nødrutiner** Ikke nødvendig.
- **6.2 Forsiktighetsregler med hensyn til miljø**
Ansvarlige myndigheter varsles hvis produktet er kommet ned i vassdrag eller kloakk.
La ikke produktet komme ned i kloakk/overflatevann/grunnvann.
- **6.3 Metoder og materialer for oppsamling og rensing**
Bortskaff kontaminert materiale som avfall i.h.t. punkt 13.
Sørg for tilstrekkelig ventilasjon.
- **6.4 Henvisning til andre avsnitt**
Informasjoner om sikker håndtering, se kapittel 7.
Informasjoner om personlig beskyttelsesutstyr, se kapittel 8.
Informasjoner om bortskaffelse/deponering, se kapittel 13.

Avsnitt 7: Håndtering og lagring

- **7.1 Forsiktighetsregler for sikker håndtering**
God avstøvning.
Sørg for god ventilasjon/avsugning på arbeidsplassen.
Beholderne må åpnes og håndteres forsiktig.
- **Henvisninger om brann- og eksplosjonsvern:** Hold åndedrettsbeskyttelse i beredskap.
- **7.2 Vilkår for sikker lagring, herunder eventuelle uforenligheter**
- **Lagring:**
- **Krav til lagerrom og beholdere:** Ingen spesielle krav.
- **Informasjoner om felles lagring:** Ikke nødvendig.
- **Ytterligere informasjon om lagervilkårene:** Hold beholderne tett tillukket.
- **7.3 Særlig(e) sluttanvendelse(r)** Ikke noe mer relevant informasjon tilgjengelig.

Avsnitt 8: Eksponeringskontroll / personlig verneutstyr

- **8.1 Kontrollparametere**
- **Ytterligere informasjon om utforming av tekniske anlegg:** Ingen ytterligere informasjon, se punkt 7.
- **Komponenter med grenseverdier for arbeidsplass som må overholdes:** Bortfaller.
- **Ytterligere informasjon:** Basis: listene som var gyldige ved oppstillingen.
- **8.2 Eksponeringskontroll**
- **Personlig verneutstyr:**
- **Generelle verne- og hygienetiltak:**
Holdes adskilt fra næringsmidler, drikkevarer og fôrstoffer.
Fjern omgående forurensede, gjennomvætede klær.

(fortsatt på side 4)

Sikkerhetsdatablad

iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 30.12.2021

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Handelsnavn: Lead Citrate, Trihydrate

(fortsatt fra side 3)

Vask hendene før arbeidspauser og ved arbeidets slutt.

Beskyttelsesklær må oppbevares adskilt.

· **Åndedrettsvern:**

Ved korttidig eller liten belastning åndedrettsfilterapparat; ved intensiv eller lengre utsetting: bruk omluft-uavhengig åndedrettsbeskyttelsesapparat.

· **Håndvern:**

Hanskematerialet må være ugjennomtrengelig og bestandig overfor produktet /stoffet /blandingen.

På grunn av manglende tester kan det ikke gis noen anbefaling om hanskemateriale for produktet / tilberedningsprosessen/kjemikalieblandingen.

Hanskematerialet velges under hensyntagen til holdbarhetstid, gjennomtrengelighet og degradering.

· **hanskemateriale**

Valget av egnet hanske er ikke bare avhengig av materiale, men også av andre kvalitetskjenner og er forskjellig fra produsent til produsent.

· **gjennomtrengingstid for hanskemateriale**

Den nøyaktige holdbarhetstiden må bringes på det rene hos hanskeprodusenten og overholdes.

· **Øyevern:** Ikke nødvendig.

Avsnitt 9: Fysiske og kjemiske egenskaper

· **9.1 Opplysninger om grunnleggende fysiske og kjemiske egenskaper**

· **alminnelige opplysninger**

· **Utseende:**

· **Form:** Fast

· **Farge:** Ikke bestemt.

· **Lukt:** Karakteristisk

· **Luktterskel:** Ikke bestemt.

· **pH-verdi:** Ikke brukbar.

· **Tilstandsending**

· **Smeltepunkt/frysepunkt:** Ikke bestemt.

· **Startkokepunkt og kokeområde:** Ikke bestemt.

· **Flammepunkt:** Ikke brukbar.

· **Antennelighet (fast stoff, gass):** Stoffet er ikke antennelig.

· **Nedbrytingstemperatur:** Ikke bestemt.

· **Selvantennelsestemperatur:** Ikke bestemt.

· **Eksplorative egenskaper:** Produktet er ikke eksplosjonsfarlig.

· **Ekspljosjonsgrenser:**

· **Nedre:** Ikke bestemt.

· **Øvre:** Ikke bestemt.

· **Damptrykk:** Ikke brukbar.

· **Tetthet:** Ikke bestemt.

· **Relativ tetthet:** Ikke bestemt.

· **Damptetthet:** Ikke brukbar.

· **Fordampingshastighet:** Ikke brukbar.

· **Løslighet i / blandbarhet med vann:**

Ikke bestemt.

· **Fordelingskoeffisient; n-oktanol/vann:** Ikke bestemt.

(fortsatt på side 5)

Sikkerhetsdatablad

iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 30.12.2021

revidert den: 30.12.2021

Handelsnavn: Lead Citrate, Trihydrate

(fortsatt fra side 4)

- | | |
|---------------------------------|---|
| · Viskositet: | |
| Dynamisk: | Ikke brukbar. |
| Kinematisk: | Ikke brukbar. |
| · 9.2 Andre opplysninger | Ikke noe mer relevant informasjon tilgjengelig. |

Avsnitt 10: Stabilitet og reaktivitet

- **10.1 Reaktivitet** Ikke noe mer relevant informasjon tilgjengelig.
- **10.2 Kjemisk stabilitet**
- **Termisk spaltning / vilkår som må unngås:** Ingen spaltning ved formålsriktig bruk.
- **10.3 Risiko for farlige reaksjoner** Det kjennes ingen farlige reaksjoner.
- **10.4 Forhold som skal unngås** Ikke noe mer relevant informasjon tilgjengelig.
- **10.5 Uforenlige materialer** Ikke noe mer relevant informasjon tilgjengelig.
- **10.6 Farlige nedbrytingsprodukter** Ingen farlige spaltningsprodukter kjente.

Avsnitt 11: Toksikologiske opplysninger

- **11.1 Opplysninger om toksikologiske virkninger**
- **Akutt giftighet**
Farlig ved svelging eller innånding.
- **Primær irritasjonsvirkning:**
- **Hudetsing/hudirritasjon** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Alvorlig øyeskade/øyeirritasjon** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Sensibilisering ved innånding eller hudkontakt** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Informasjon om følgende grupper med potensielle virkninger:**
- **CMR-virkninger (kreftfremkallende virkninger, arvestoffskadelige og reproduksjonsskadelige virkninger)**
- **Arvestoffskadelig virkning på kjønnseller** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Kreftframkallende egenskap** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Reproduksjonstoksisitet**
Kan gi fosterskader. Mistenkes for å kunne skade forplantningsevnen.
- **STOT – enkelteksponering** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **STOT – gjentatt eksponering**
Kan forårsake organskader ved langvarig eller gjentatt eksponering.
- **Aspirasjonsfare** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.

Avsnitt 12: Økologiske opplysninger

- **12.1 Giftighet**
- **Akvatisk toksisitet:** Ikke noe mer relevant informasjon tilgjengelig.
- **12.2 Persistens og nedbrytbarhet** Ikke noe mer relevant informasjon tilgjengelig.
- **12.3 Bioakkumuleringsevne** Ikke noe mer relevant informasjon tilgjengelig.
- **12.4 Mobilitet i jord** Ikke noe mer relevant informasjon tilgjengelig.
- **Økotoksiske virkninger:**
- **Bemerkning:** meget giftig for fisk
- **Ytterligere økologiske informasjon:**
- **Generelle informasjon:**
Vannfareklasse 3 (D) (Selvklassifisering): meget farlig for vann
Ikke la stoffet komme ned i grunnvannet, i vassdrag eller i kloakker, heller ikke i små mengder.
Fare for drikkevann allerede ved utstrømning av meget små mengder i marken.

(fortsatt på side 6)

Sikkerhetsdatablad

iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 30.12.2021

revidert den: 30.12.2021

Handelsnavn: Lead Citrate, Trihydrate

(fortsatt fra side 5)

- I vassdrag også giftig for fisker og plankton.
meget giftig for vannorganismer
- **12.5 Resultater av PBT- og vPvB-vurdering**
 - **PBT:** Ikke brukbar.
 - **vPvB:** Ikke brukbar.
 - **12.6 Andre skadevirkninger** Ikke noe mer relevant informasjon tilgjengelig.

Avsnitt 13: Sluttbehandling

- **13.1 Avfallsbehandlingsmetoder**
- **Anbefaling:** Må ikke bortskaffes sammen med husholdningsavfall. Må ikke komme ned i kloakk.
- **Ikke rengjort emballasje:**
- **Anbefaling:** Deponering i henhold til myndighetenes forskrifter.

Avsnitt 14: Transportopplysninger

- | | |
|--|---|
| · 14.1 FN-nummer | |
| · ADR, IMDG, IATA | UN2291 |
| · 14.2 FN-forsendelsesnavn | |
| · ADR | 2291 BLYFORBINDELSE, LØSELIG, N.O.S. (Lead Citrate, Trihydrate), MILJØSKADELG STOFF |
| · IMDG | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT |
| · IATA | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate) |
| · 14.3 Transportfareklasse(r) | |
| · ADR, IMDG | |
| | |
| · klasse | 6.1 Giftige stoffer |
| · Fareseddel | 6.1 |
| · IATA | |
| | |
| · Class | 6.1 Giftige stoffer |
| · Label | 6.1 |
| · 14.4 Emballasjegruppe | |
| · ADR, IMDG, IATA | III |
| · 14.5 Miljøfarer | Miljøskadelig stoff, i fast form; Marine Pollutant |
| · Marine pollutant: | Symbol (fisk og treet) |
| · Spesielle merking (ADR): | Symbol (fisk og treet) |
| · 14.6 Særlige forsiktighetsregler ved bruk | Advarsel: Giftige stoffer |

(fortsatt på side 7)

Sikkerhetsdatablad

iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 30.12.2021

revidert den: 30.12.2021

Handelsnavn: Lead Citrate, Trihydrate

(fortsatt fra side 6)

· Farenummer (Kemler-tall):	60
· EMS-nummer:	6.1-04
· Segregation groups	Heavy metals and their salts (including their organometallic compounds), lead and its compounds
· Stowage Category	A
· 14.7 Bulktransport i henhold til vedlegg II til MARPOL 73/78 og IBC-regelverket	Ikke brukbar.
· Transport/ytterligere informasjoner:	
· ADR	
· Begrenset mengde (LQ)	5 kg
· Unntatte mengder (EQ)	Kode: E1 Maksimal nettovekt per inneremballasje: 30 g Maksimal nettovekt per ytteremballasje: 1000 g
· Transportkategori	2
· Tunnel restriksjonskode	E
· IMDG	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN "Model Regulation":	UN 2291 BLYFORBINDELSE, LØSELIG, N.O.S. (LEAD CITRATE, TRIHYDRATE), 6.1, III, MILJØSKADELG STOFF

Avsnitt 15: Opplysninger om regelverk

- 15.1 Særlige bestemmelser / særskilt lovgivning om sikkerhet, helse og miljø for stoffet eller stoffblandingen
- Direktiv 2012/18/EU
- Spesifiserte farlige stoffer - VEDLEGG I Inneholder ikke stoffet.
- Seveso kategori E1
- Mengdegrense (i tonn) for anvendelsen av krav til virksomheter på lavere nivå 100 t
- Mengdegrense (i tonn) for anvendelsen av krav til virksomheter på høyere nivå 200 t
- Forordning (EF) nr. 1907/2006 VEDLEGG XVII Begrensninger: 30, 63, 72
- Forordning (EF) nr. 649/2012 Annex I Part 1
- Direktiv 2011/65/EF om begrensning av bruken av visse farlige stoffer i elektrisk og elektronisk utstyr - Vedlegg II
Inneholder ikke stoffet.
- Forordning (EF) nr. 273/2004 om utgangsstoffer for narkotika Inneholder ikke stoffet.
- Forordning (EF) nr. 111/2005 om fastsettelse av regler for overvåking av handelen med utgangsstoffer for narkotika mel-lom Fellesskapet og tredjestater
Inneholder ikke stoffet.
- 15.2 Vurdering av kjemikaliesikkerhet En kjemisk sikkerhetsvurdering er ikke utført.

Avsnitt 16: Andre opplysninger

Opplysningene er basert på vårt kjennskap i dag. De utgjør dog ingen forsikring om produktens egenskaper og er ikke grunnlag for noe kontraktmessig rettsforhold.

· Forkortelser og akronymer:

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

(fortsatt på side 8)

Sikkerhetsdatablad
iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 30.12.2021

revidert den: 30.12.2021

Handelsnavn: Lead Citrate, Trihydrate

(fortsatt fra side 7)

*IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**GHS: Globally Harmonised System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 4: Akutt giftighet – Kategori 4**Repr. 1A: Reproduksjonstoksisitet – Kategori 1A**STOT RE 2: Giftvirkning på bestemte organer (gjentatt eksponering) – Kategori 2**Aquatic Acute 1: Farlig for vannmiljøet - akutt fare for vannmiljøet – Kategori 1**Aquatic Chronic 1: Farlig for vannmiljøet - langsiktig fare for vannmiljøet – Kategori 1*

NO

Karta charakterystyki

Zgodnie z 1907/2006/WE, Artykuł 31

Data druku: 30.12.2021

Aktualizacja: 30.12.2021

SEKCJA 1: Identyfikacja substancji/mieszaniny i identyfikacja przedsiębiorstwa

- **1.1 Identyfikator produktu**
- **Nazwa handlowa:** Lead Citrate, Trihydrate
- **Numer artykułu:** 17800, 17810
- **Numer według CAS:**
512-26-5
- **Numer WE:**
208-141-1
- **Numer indeksu:**
082-001-00-6
- **1.2 Istotne zidentyfikowane zastosowania substancji lub mieszaniny oraz zastosowania odradzane**
Brak dostępnych dalszych istotnych danych
- **Zastosowanie substancji / preparatu** Odczynniki laboratoryjne
- **1.3 Dane dotyczące dostawcy karty charakterystyki**
- **Producent/Dostawca:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Komórka udzielająca informacji:** Product safety department
- **1.4 Numer telefonu alarmowego:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

SEKCJA 2: Identyfikacja zagrożeń

- **2.1 Klasyfikacja substancji lub mieszaniny**
- **Klasyfikacja zgodnie z rozporządzeniem (WE) nr 1272/2008**



GHS08 zagrożenie dla zdrowia

Repr. 1A H360Df *Może działać szkodliwie na dziecko w łonie matki. Podejrzewa się, że działa szkodliwie na płodność.*

STOT RE 2 H373 *Może powodować uszkodzenie narządów poprzez długotrwałe lub narażenie powtarzane.*



GHS09 środowisko

Aquatic Acute 1 H400 *Działa bardzo toksycznie na organizmy wodne.*

Aquatic Chronic 1 H410 *Działa bardzo toksycznie na organizmy wodne, powodując długotrwałe skutki.*



GHS07

Acute Tox. 4 H302 *Działa szkodliwie po połknięciu.*

Acute Tox. 4 H332 *Działa szkodliwie w następstwie wdychania.*

(ciąg dalszy na stronie 2)

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(ciąg dalszy od strony 1)

- **2.2 Elementy oznakowania**
- **Oznakowanie zgodnie z rozporządzeniem (WE) nr 1272/2008**
Substancja jest klasyfikowana i oznakowana zgodnie z przepisami CLP.
- **Piktogramy określające rodzaj zagrożenia**



GHS07 GHS08 GHS09

- **Hasło ostrzegawcze** *Niebezpieczeństwo*
- **Zwroty wskazujące rodzaj zagrożenia**
 - H302+H332 Działa szkodliwie po połknięciu lub w następstwie wdychania.*
 - H360Df Może działać szkodliwie na dziecko w tonie matki. Podejrzewa się, że działa szkodliwie na płodność.*
 - H373 Może powodować uszkodzenie narządów poprzez długotrwałe lub narażenie powtarzane.*
 - H410 Działa bardzo toksycznie na organizmy wodne, powodując długotrwałe skutki.*
- **Zwroty wskazujące środki ostrożności**
 - P260 Nie wdychać pyłu/dymu/gazu/mgły/par/rozpylonej cieczy.*
 - P280 Stosować rękawice ochronne/odzież ochronną/ochronę oczu/ochronę twarzy/ochronę słuchu.*
 - P301+P312 W PRZYPADKU POŁKNIECIA: W przypadku złego samopoczucia skontaktować się z OŚRODKIEM ZATRUĆ/lekarzem.*
 - P304+P340 W PRZYPADKU DOSTANIA SIĘ DO DRÓG ODDECHOWYCH: wyprowadzić lub wynieść poszkodowanego na świeże powietrze i zapewnić mu warunki do swobodnego oddychania.*
 - P405 Przechowywać pod zamknięciem.*
 - P501 Zawartość / pojemnik usuwać zgodnie z przepisami miejscowymi / regionalnymi / narodowymi / międzynarodowymi.*
- **Dane dodatkowe:**
Zawiera ołów. Nie należy stosować na powierzchniach, które mogą być gryzione lub ssane przez dzieci.
- **2.3 Inne zagrożenia**
- **Wyniki oceny właściwości PBT i vPvB**
- **PBT:** Nie ma zastosowania.
- **vPvB:** Nie ma zastosowania.

SEKCJA 3: Skład/informacja o składnikach

- **3.1 Charakterystyka chemiczna: Substancje**
- **Nazwa wg nr CAS**
512-26-5 Lead Citrate, Trihydrate
- **Numer(y) identyfikacyjny(e)**
- **Numer WE:** *208-141-1*
- **Numer indeksu:** *082-001-00-6*

SEKCJA 4: Środki pierwszej pomocy

- **4.1 Opis środków pierwszej pomocy**
- **Wskazówki ogólne:**
Symptomy zatrucia mogą wystąpić dopiero po kilku godzinach, dlatego kontrola lekarska niezbędna conajmniej przez 48 godzin po wypadku.
- **Po wdychaniu:**
Dostarczyć świeże powietrze, ewentualnie sztuczne oddychanie, ciepło. W przypadku utrzymujących się dolegliwości skonsultować z lekarzem.
W przypadku utraty przytomności ułożenie i transport w stabilnej pozycji bocznej.

(ciąg dalszy na stronie 3)

Karta charakterystyki

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(ciąg dalszy od strony 2)

- **Po styczności ze skórą:** Ogólnie produkt nie działa drażniąco na skórę.
- **Po styczności z okiem:** Płukać oczy z otwartą powieką przez kilka minut pod bieżącą wodą.
- **Po przełknięciu:** Natychmiast udać się do lekarza.
- **4.2 Najważniejsze ostre i opóźnione objawy oraz skutki narażenia** Brak dostępnych dalszych istotnych danych
- **4.3 Wskazania dotyczące wszelkiej natychmiastowej pomocy lekarskiej i szczególnego postępowania z poszkodowanym**
Brak dostępnych dalszych istotnych danych

SEKCJA 5: Postępowanie w przypadku pożaru

- **5.1 Środki gaśnicze**
- **Przydatne środki gaśnicze:** Zabiegi gaszenia ognia dostosować do otoczenia.
- **5.2 Szczególne zagrożenia związane z substancją lub mieszaniną** Brak dostępnych dalszych istotnych danych
- **5.3 Informacje dla straży pożarnej**
- **Specjalne wyposażenie ochronne:** Założyć urządzenie ochrony dróg oddechowych.

SEKCJA 6: Postępowanie w przypadku niezamierzonego uwolnienia do środowiska

- **6.1 Indywidualne środki ostrożności, wyposażenie ochronne i procedury w sytuacjach awaryjnych**
Nie konieczne.
- **6.2 Środki ostrożności w zakresie ochrony środowiska:**
W przypadku przedostania się do zbiorników wodnych lub kanalizacji zawiadomić właściwe władze.
Nie dopuścić do przeniknięcia do kanalizacji /wód powierzchniowych /wód gruntowych.
- **6.3 Metody i materiały zapobiegające rozprzestrzenianiu się skażenia i służące do usuwania skażenia:**
Materiał skażony usunąć jako odpad wg punktu 13.
Zadbać o wystarczające przewietrzenie.
- **6.4 Odniesienia do innych sekcji**
Informacje na temat bezpiecznej obsługi patrz rozdział 7.
Informacje na temat osobistego wyposażenia ochronnego patrz rozdział 8.
Informacje na temat utylizacji patrz rozdział 13.

SEKCJA 7: Postępowanie z substancjami i mieszaninami oraz ich magazynowanie

- **7.1 Środki ostrożności dotyczące bezpiecznego postępowania**
Dobre odpylenie.
Zadbać o dobry nawiew /odsysanie w miejscu pracy.
Zbiorniki otwierać i obchodzić się z nimi ostrożnie.
- **Wskazówki dla ochrony przeciwpożarowej i przeciwybuchowej:**
Mieć w pogotowiu przyrządy do ochrony dróg oddechowych.
- **7.2 Warunki bezpiecznego magazynowania, w tym informacje dotyczące wszelkich wzajemnych niezgodności**
- **Składowanie:**
- **Wymagania w stosunku do pomieszczeń składowych i zbiorników:** Brak szczególnych wymagań.
- **Wskazówki odnośnie wspólnego składowania:** Nie konieczne.
- **Dalsze wskazówki odnośnie warunków składowania:** Zbiornik trzymać szczelnie zamknięty.
- **7.3 Szczególne zastosowanie(-a) końcowe** Brak dostępnych dalszych istotnych danych

SEKCJA 8: Kontrola narażenia/środki ochrony indywidualnej

- **8.1 Parametry dotyczące kontroli**
- **Dodatkowe wskazówki dla wykonania urządzeń technicznych:** Brak dalszych danych, patrz punkt 7.

(ciąg dalszy na stronie 4)

Karta charakterystyki

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(ciąg dalszy od strony 3)

- **Składniki wraz z kontrolowanymi wartościami granicznymi zależnymi od miejsca pracy:** *Nie dotyczy.*
- **Wskazówki dodatkowe:** *Podstawą były aktualnie obowiązujące wykazy.*
- **8.2 Kontrola narażenia**
- **Osobiste wyposażenie ochronne:**
- **Ogólne środki ochrony i higieny:**
 - Trzymać z dala od środków spożywczych napojów i pasz.*
 - Zabrudzoną, nasączoną odzież natychmiast zdjąć.*
 - Myć ręce przed przerwą i przed końcem pracy.*
 - Oddzielne przechowywanie odzieży ochronnej.*
- **Ochrona dróg oddechowych:**
 - W przypadku krótkotrwałego lub nieznacznego obciążenia urządzenie filtrujące do oddychania; w przypadku intensywnej lub dłuższej ekspozycji zastosować urządzenie do ochrony dróg oddechowych niezależne od powietrza otoczenia.*
- **Ochrona rąk:**
 - Materiał, z którego wykonane są rękawice musi być nieprzepuszczalny i odporny na działanie produktu / substancji / preparatu.*
 - Z powodu braku badań nie można podać żadnego zalecenia dotyczącego materiału dla rękawic do ochrony przed produktem / preparatem / mieszaniną substancji chemicznych.*
 - Wybór materiału na rękawice ochronne przy uwzględnieniu czasów przebicia, szybkości przenikania i degradacji.*
- **Materiał, z którego wykonane są rękawice**
 - Wybór odpowiednich rękawic nie zależy tylko od materiału, lecz także od innych cech jakościowych i zmienia się od producenta do producenta.*
- **Czas penetracji dla materiału, z którego wykonane są rękawice**
 - Od producenta rękawic należy uzyskać informację na temat dokładnego czasu przebicia i go przestrzegać.*
- **Ochrona oczu:** *Nie konieczne.*

SEKCJA 9: Właściwości fizyczne i chemiczne

- **9.1 Informacje na temat podstawowych właściwości fizycznych i chemicznych**
- **Ogólne dane**
- **Wygląd:**
 - Forma:** Stały
 - Kolor:** Nieokreślone.
- **Zapach:** Charakterystyczny
- **Próg zapachu:** Nieokreślone.
- **Wartość pH:** Nie ma zastosowania.
- **Zmiana stanu**
 - Temperatura topnienia/krzepnięcia:** Nie jest określony.
 - Początkowa temperatura wrzenia i zakres temperatur wrzenia:** Nie jest określony.
- **Temperatura zapłonu:** Nie ma zastosowania.
- **Palność (ciała stałego, gazu):** Materiał nie jest zapalny.
- **Temperatura rozkładu:** Nieokreślone.
- **Temperatura samozapłonu:** Nieokreślone.
- **Właściwości wybuchowe:** Produkt nie jest grozi wybuchem.
- **Granice niebezpieczeństwa wybuchu:**
 - Dolna:** Nieokreślone.

(ciąg dalszy na stronie 5)

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(ciąg dalszy od strony 4)

Górna:	Nieokreślone.
· Prężność par:	Nie ma zastosowania.
· Gęstość:	Nie jest określony.
· Gęstość względna	Nieokreślone.
· Gęstość par	Nie ma zastosowania.
· Szybkość parowania	Nie ma zastosowania.
· Rozpuszczalność w/ mieszalność z Woda:	Nieokreślone.
· Współczynnik podziału: n-oktanol/woda:	Nieokreślone.
· Lepkość:	
Dynamiczna:	Nie ma zastosowania.
Kinetyczna:	Nie ma zastosowania.
· 9.2 Inne informacje	Brak dostępnych dalszych istotnych danych

SEKCJA 10: Stabilność i reaktywność

- **10.1 Reaktywność** Brak dostępnych dalszych istotnych danych
- **10.2 Stabilność chemiczna**
- **Rozkład termiczny/ warunki których należy unikać:** Brak rozkładu przy użyciu zgodnym z przeznaczeniem.
- **10.3 Możliwość występowania niebezpiecznych reakcji** Reakcje niebezpieczne nie są znane.
- **10.4 Warunki, których należy unikać** Brak dostępnych dalszych istotnych danych
- **10.5 Materiały niezgodne:** Brak dostępnych dalszych istotnych danych
- **10.6 Niebezpieczne produkty rozkładu:** Niebezpieczne produkty rozkładu nie są znane.

SEKCJA 11: Informacje toksykologiczne

- **11.1 Informacje dotyczące skutków toksykologicznych**
- **Toksyczność ostra**
Działa szkodliwie po połknięciu lub w następstwie wdychania.
- **Pierwotne działanie drażniące: Działanie Gatunek Metoda:**
- **Działanie żrące/drażniące na skórę** W oparciu o dostępne dane, kryteria klasyfikacji nie są spełnione.
- **Poważne uszkodzenie oczu/działanie drażniące na oczy**
W oparciu o dostępne dane, kryteria klasyfikacji nie są spełnione.
- **Działanie uczulające na drogi oddechowe lub skórę**
W oparciu o dostępne dane, kryteria klasyfikacji nie są spełnione.
- **Dodatkowe wskazówki toksykologiczne:**
- **Działanie rakotwórcze, działanie mutagenne i szkodliwe działanie na rozrodczość (CMR)**
- **Działanie mutagenne na komórki rozrodcze** W oparciu o dostępne dane, kryteria klasyfikacji nie są spełnione.
- **Rakotwórczość** W oparciu o dostępne dane, kryteria klasyfikacji nie są spełnione.
- **Szkodliwe działanie na rozrodczość**
Może działać szkodliwie na dziecko w łonie matki. Podejrzewa się, że działa szkodliwie na płodność.
- **Działanie toksyczne na narządy docelowe – narażenie jednorazowe**
W oparciu o dostępne dane, kryteria klasyfikacji nie są spełnione.
- **Działanie toksyczne na narządy docelowe – narażenie powtarzane**
Może powodować uszkodzenie narządów poprzez długotrwałe lub narażenie powtarzane.
- **Zagrożenie spowodowane aspiracją** W oparciu o dostępne dane, kryteria klasyfikacji nie są spełnione.

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(ciąg dalszy na stronie 6)

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SEKCJA 12: Informacje ekologiczne

- **12.1 Toksyczność**
- **Toksyczność wodna:** Brak dostępnych dalszych istotnych danych
- **12.2 Trwałość i zdolność do rozkładu** Brak dostępnych dalszych istotnych danych
- **12.3 Zdolność do bioakumulacji** Brak dostępnych dalszych istotnych danych
- **12.4 Mobilność w glebie** Brak dostępnych dalszych istotnych danych
- **Skutki ekotoksyczne:**
- **Uwaga:** Bardzo trujący dla ryb.
- **Dalsze wskazówki ekologiczne:**
- **Wskazówki ogólne:**
 Klasa szkodliwości dla wody 3 (samookreślenie) silnie szkodliwy dla wody
 Nie dopuścić do przedostania się nawet w małych ilościach do wód gruntowych, wód powierzchniowych bądź do kanalizacji.
 Szkodliwy dla wody pitnej nawet przy przedostaniu się minimalnych ilości do podłoża.
 W zbiornikach wodnych trujący także dla ryb i planktonu.
 bardzo trujący dla organizmów wodnych
- **12.5 Wyniki oceny właściwości PBT i vPvB**
- **PBT:** Nie ma zastosowania.
- **vPvB:** Nie ma zastosowania.
- **12.6 Inne szkodliwe skutki działania** Brak dostępnych dalszych istotnych danych

SEKCJA 13: Postępowanie z odpadami

- **13.1 Metody unieszkodliwiania odpadów**
- **Zalecenie:**
 Nie może podlegać obróbce wspólnie z odpadkami domowymi. Nie dopuścić do przedostania się do kanalizacji.
- **Opakowania nieoczyszczone:**
- **Zalecenie:** Usuwanie zgodnie z obowiązującymi przepisami.

SEKCJA 14: Informacje dotyczące transportu

- | | |
|--|---|
| · 14.1 Numer UN | |
| · ADR, IMDG, IATA | UN2291 |
| · 14.2 Prawidłowa nazwa przewozowa UN | |
| · ADR | 2291 ZWIĄZEK OŁOWIU, ROZPUSZCZALNY, I.N.O. (Lead Citrate, Trihydrate), ZAGRAŻAJĄCY ŚRODOWISKU |
| · IMDG | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT |
| · IATA | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate) |

(ciąg dalszy na stronie 7)

Karta charakterystyki

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(ciąg dalszy od strony 6)

· **14.3 Klasa(-y) zagrożenia w transporcie**

· **ADR, IMDG**



· **Klasa**

6.1 materiały trujące

· **Nalepka**

6.1

· **IATA**



· **Class**

6.1 materiały trujące

· **Label**

6.1

· **14.4 Grupa pakowania**

· **ADR, IMDG, IATA**

III

· **14.5 Zagrożenia dla środowiska:**

Materiał zagrażający środowisku, stały; Zanieczyszczenia morskie

· **Zanieczyszczenia morskie:**

Symbol (ryby i drzewa)

· **Szczególne oznakowania (ADR):**

Symbol (ryby i drzewa)

· **14.6 Szczególne środki ostrożności dla użytkowników** Uwaga: materiały trujące

· **Numer rozpoznawczy zagrożenia (Liczba Kemlera):** 60

· **Numer EMS:**

6.1-04

· **Segregation groups**

Heavy metals and their salts (including their organometallic compounds), lead and its compounds

· **Stowage Category**

A

· **14.7 Transport luzem zgodnie z załącznikiem II do konwencji MARPOL i kodeksem IBC**

Nie ma zastosowania.

· **Transport/ dalsze informacje:**

· **ADR**

· **Ilości ograniczone (LQ)**

5 kg

· **Ilości wyłączone (EQ)**

Kod: E1

Maksymalna ilość netto na opakowanie wewnętrzne: 30 g

Maksymalna ilość netto na opakowanie zewnętrzne: 1000

g

· **Kategoria transportowa**

2

· **Kodów zakazu przewozu przez tunele**

E

· **IMDG**

· **Limited quantities (LQ)**

5 kg

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

(ciąg dalszy na stronie 8)

Karta charakterystyki

Zgodnie z 1907/2006/WE, Artykuł 31

Data druku: 30.12.2021

Aktualizacja: 30.12.2021

Nazwa handlowa: *Lead Citrate, Trihydrate*

(ciąg dalszy od strony 7)

<ul style="list-style-type: none"> · UN "Model Regulation": 	<p style="text-align: center;">UN 2291 ZWIĄZEK OŁOWIU, ROZPUSZCZALNY, I.N.O. (LEAD CITRATE, TRIHYDRATE), 6.1, III, ZAGRAŻAJĄCY ŚRODOWISKU</p>
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SEKCJA 15: Informacje dotyczące przepisów prawnych

- **15.1 Przepisy prawne dotyczące bezpieczeństwa, zdrowia i ochrony środowiska specyficzne dla substancji i mieszaniny**
- **Rady 2012/18/UE**
- **Wskazane substancje niebezpieczne - ZAŁĄCZNIK I** Substancja nie zawarta
- **Kategorię Seveso E1** Niebezpieczne dla środowiska wodnego
- **Ilości progowe (w tonach) wiążące się z zastosowaniem wymogów dotyczących zakładów o zwiększonym ryzyku 100 t**
- **Ilości progowe (w tonach) wiążące się z zastosowaniem wymogów dotyczących zakładów o dużym ryzyku 200 t**
- **Rozporządzenie (WE) nr 1907/2006 ZAŁĄCZNIK XVII** Warunki ograniczenia: 30, 63, 72
- **Rozporządzenie (UE) NR 649/2012 Annex I Part 1**
- **Dyrektywa 2011/65/UE w sprawie ograniczenia stosowania niektórych niebezpiecznych substancji w sprzęcie elektrycznym i elektronicznym - Załącznik II**
Substancja nie zawarta
- **ROZPORZĄDZENIE (UE) 2019/1148**
- **Załącznik I - PREKURSORY MATERIAŁÓW WYBUCHOWYCH PODLEGAJĄCE OGRANICZENIOM** (Górna wartość graniczna do celów wydawania pozwoleń na podstawie art. 5 ust. 3)
Substancja nie zawarta
- **Załącznik II - PREKURSORY MATERIAŁÓW WYBUCHOWYCH PODLEGAJĄCE OBOWIĄZKOWI ZGŁOSZENIA**
Substancja nie zawarta
- **Rozporządzenie (WE) nr 273/2004 w sprawie prekursorów narkotykowych** Substancja nie zawarta
- **Rozporządzenie (WE) NR 111/2005 określające zasady nadzorowania handlu prekursorami narkotyków pomiędzy Wspólnotą a państwami trzecimi**
Substancja nie zawarta
- **15.2 Ocena bezpieczeństwa chemicznego:** Ocena Bezpieczeństwa Chemicznego nie została przeprowadzona.

SEKCJA 16: Inne informacje

Dane opierają się na dzisiejszym stanie naszej wiedzy, nie określają jednak w sposób ostateczny właściwości produkcyjnych i nie mogą być uzasadnieniem prawomocnych umów.

· **Skróty i akronimy:**

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Toksyczność ostra – Kategoria 4

Repr. 1A: Działanie szkodliwe na rozrodczość – Kategoria 1A

STOT RE 2: Działanie toksyczne na narządy docelowe (powtarzane narażenie) – Kategoria 2

Aquatic Acute 1: Stwarzające zagrożenie dla środowiska wodnego - ostre zagrożenie dla środowiska wodnego – Kategoria 1

Aquatic Chronic 1: Stwarzające zagrożenie dla środowiska wodnego - długotrwałe zagrożenie dla środowiska wodnego – Kategoria 1

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SECÇÃO 1: Identificação da substância/mistura e da sociedade/empresa

- **1.1 Identificador do produto**
- **Nome comercial:** dicitrato de trichumbo
- **Código do produto:** 17800, 17810
- **Nº CAS:**
512-26-5
- **Número CE:**
208-141-1
- **Número de índice:**
082-001-00-6
- **1.2 Utilizações identificadas relevantes da substância ou mistura e utilizações desaconselhadas**
Não existe mais nenhuma informação relevante disponível.
- **Utilização da substância / da preparação** Químicos de laboratório
- **1.3 Identificação do fornecedor da ficha de dados de segurança**
- **Fabricante/fornecedor:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Entidade para obtenção de informações adicionais:** Product safety department
- **1.4 Número de telefone de emergência:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

SECÇÃO 2: Identificação dos perigos

- **2.1 Classificação da substância ou mistura**
- **Classificação em conformidade com o Regulamento (CE) n.º 1272/2008**



GHS08 perigo para a saúde

Repr. 1A H360Df *Pode afectar o nascituro. Suspeito de afectar a fertilidade.*
STOT RE 2 H373 *Pode afectar os órgãos após exposição prolongada ou repetida.*



GHS09 ambiente

Aquatic Acute 1 H400 *Muito tóxico para os organismos aquáticos.*
Aquatic Chronic 1 H410 *Muito tóxico para os organismos aquáticos com efeitos duradouros.*



GHS07

Acute Tox. 4 H302 *Nocivo por ingestão.*
Acute Tox. 4 H332 *Nocivo por inalação.*

- **2.2 Elementos do rótulo**
- **Rotulagem em conformidade com o Regulamento (CE) n.º 1272/2008**
A substância classificou-se e está etiquetado em conformidade com o regulamento CLP.

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· **Pictogramas de perigo**

GHS07 GHS08 GHS09

· **Palavra-sinal Perigo**· **Advertências de perigo**

H302+H332 Nocivo por ingestão ou inalação.

H360Df Pode afectar o nascituro. Suspeito de afectar a fertilidade.

H373 Pode afectar os órgãos após exposição prolongada ou repetida.

H410 Muito tóxico para os organismos aquáticos com efeitos duradouros.

· **Recomendações de prudência**

P260 Não respirar as poeiras/fumos/gases/névoas/vapores/aerossóis.

P280 Usar luvas de proteção/vestuário de proteção/proteção ocular/proteção facial/proteção auditiva.

P301+P312 EM CASO DE INGESTÃO: caso sinta indisposição, contacte um CENTRO DE INFORMAÇÃO ANTIVENENOS/médico.

P304+P340 EM CASO DE INALAÇÃO: retirar a pessoa para uma zona ao ar livre e mantê-la numa posição que não dificulte a respiração.

P405 Armazenar em local fechado à chave.

P501 Eliminar o conteúdo/recipiente de acordo com a legislação local/regional/nacional/internacional.

· **Indicações adicionais:**

Contém chumbo. Não utilizar em superfícies que possam ser mordidas ou chupadas por crianças.

· **2.3 Outros perigos**· **Resultados da avaliação PBT e mPmB**· **PBT:** Não aplicável.· **mPmB:** Não aplicável.

SECÇÃO 3: Composição/informação sobre os componentes

· **3.1 Caracterização química: Substâncias**· **Designação CAS n°**

512-26-5 dicitrato de trichumbo

· **Número(s) de identificação**· **Número CE:** 208-141-1· **Número de índice:** 082-001-00-6

SECÇÃO 4: Medidas de primeiros socorros

· **4.1 Descrição das medidas de primeiros socorros**· **Indicações gerais:**

Os sintomas de envenenamento podem surgir apenas após várias horas, por isso é necessária vigilância médica pelo menos 48 horas após o acidente.

· **Em caso de inalação:**

Remover a vítima para um local arejado. Se necessário administrar respiração artificial. Manter a vítima aquecida. Se os sintomas persistirem, consultar o médico.

Se a vítima estiver inconsciente, posicioná-la e transportá-la com estabilidade, deitada lateralmente.

· **Em caso de contacto com a pele:** Em geral o produto não é irritante para a pele.· **Em caso de contacto com os olhos:**

Enxaguar os olhos durante alguns minutos sob água corrente, mantendo as pálpebras abertas.

· **Em caso de ingestão:** Consultar imediatamente o médico

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- **4.2 Sintomas e efeitos mais importantes, tanto agudos como retardados**
Não existe mais nenhuma informação relevante disponível.
- **4.3 Indicações sobre cuidados médicos urgentes e tratamentos especiais necessários**
Não existe mais nenhuma informação relevante disponível.

SECÇÃO 5: Medidas de combate a incêndios

- **5.1 Meios de extinção**
- **Meios adequados de extinção:** Coordenar no local medidas para extinção do fogo.
- **5.2 Perigos especiais decorrentes da substância ou mistura**
Não existe mais nenhuma informação relevante disponível.
- **5.3 Recomendações para o pessoal de combate a incêndios**
- **Equipamento especial de protecção:** Colocar máscara de respiração.

SECÇÃO 6: Medidas a tomar em caso de fugas accidentais

- **6.1 Precauções individuais, equipamento de protecção e procedimentos de emergência** Não necessário.
- **6.2 Precauções a nível ambiental:**
Em caso de infiltrações nos leitos de água ou na canalização, comunicar aos serviços públicos competentes.
Evitar que penetre na canalização / águas superficiais / águas subterrâneas.
- **6.3 Métodos e materiais de confinamento e limpeza:**
Eliminar residualmente as substâncias contaminadas como um resíduo segundo o Ponto 13.
Assegurar uma ventilação adequada.
- **6.4 Remissão para outras secções**
Para informações sobre uma manipulação segura, ver o capítulo 7.
Para informações referentes ao equipamento de protecção individual, ver o capítulo 8.
Para informações referentes à eliminação residual, ver o capítulo 13.

SECÇÃO 7: Manuseamento e armazenagem

- **7.1 Precauções para um manuseamento seguro**
Remover completamente o pó.
Assegurar uma boa ventilação / exaustão no local de trabalho.
Abrir e manusear o recipiente com cuidado
- **Precauções para prevenir incêndios e explosões:** Manter uma máscara de respiração sempre preparada.
- **7.2 Condições de armazenagem segura, incluindo eventuais incompatibilidades**
- **Armazenagem:**
- **Requisitos para espaços ou contentores para armazenagem:** Sem requisitos especiais.
- **Avisos para armazenagem conjunta:** Não necessário.
- **Outros avisos sobre as condições de armazenagem:** Manter o recipiente hermeticamente fechado.
- **7.3 Utilização(ões) final(is) específica(s)** Não existe mais nenhuma informação relevante disponível.

SECÇÃO 8: Controlo da exposição/Protecção individual

- **8.1 Parâmetros de controlo**
- **Indicações adicionais para concepção de instalações técnicas:** Não existem outras informações, ver ponto 7.
- **Componentes cujo valor do limite de exposição no local de trabalho deve ser monitorizado:** Não aplicável.
- **Indicações adicionais:** Foram utilizadas como base as listas válidas à data da elaboração.

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- **8.2 Controlo da exposição**
- **Equipamento de protecção individual:**
- **Medidas gerais de protecção e higiene:**
Manter afastado de alimentos, bebidas e forragens.
Despir imediatamente a roupa contaminada e embebida.
Lavar as mãos antes das pausas e no fim do trabalho.
Guardar o vestuário de protecção separadamente.
- **Protecção respiratória:**
Utilizar uma máscara respiratória se a exposição for reduzida ou durante um curto espaço de tempo; se esta for mais prolongada ou mais intensa, utilizar uma máscara respiratória independente do ar ambiente.
- **Protecção das mãos:**
O material das luvas tem de ser impermeável e resistente ao produto / à substância / preparação.
Uma vez que não foram realizados testes nesta área, não podemos recomendar um determinado tipo de material para as luvas que seja adequado para o produto / a preparação / a mistura de químicos.
Escolher o material das luvas tendo em consideração a durabilidade, a permeabilidade e a degradação.
- **Material das luvas**
A escolha das luvas mais adequadas não depende apenas do material, mas também de outras características qualitativas e varia de fabricante para fabricante.
- **Tempo de penetração no material das luvas**
Deve informar-se sobre a validade exacta das suas luvas junto do fabricante e respeitá-la.
- **Protecção dos olhos:** Não necessário.

SECÇÃO 9: Propriedades físico-químicas

- **9.1 Informações sobre propriedades físicas e químicas de base**
- **Informações gerais**
- **Aspeto:**

Forma:	Sólido
Cor:	Não determinado.
- **Odor:** Característico
- **Limiar olfactivo:** Não determinado.
- **valor pH:** Não aplicável.
- **Mudança do estado:**

Ponto de fusão/ponto de congelação:	Não determinado.
Ponto de ebulição inicial e intervalo de ebulição:	Não determinado.
- **Ponto de inflamação:** Não aplicável.
- **Inflamabilidade (sólido, gás):** A substância não é inflamável.
- **Temperatura de decomposição:** Não determinado.
- **Temperatura de autoignição:** Não determinado.
- **Propriedades explosivas:** O produto não corre o risco de explosão.
- **Limites de explosão:**

Inferior:	Não determinado.
Superior:	Não determinado.
- **Pressão de vapor:** Não aplicável.
- **Densidade:** Não determinado.
- **Densidade relativa** Não determinado.
- **Densidade de vapor** Não aplicável.

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· Taxa de evaporação:	<i>Não aplicável.</i>
· Solubilidade em / miscibilidade com água:	<i>Não determinado.</i>
· Coeficiente de partição: n-octanol/água	<i>Não determinado.</i>
· Viscosidade:	
Dinâmico:	<i>Não aplicável.</i>
Cinemático:	<i>Não aplicável.</i>
· 9.2 Outras informações	<i>Não existe mais nenhuma informação relevante disponível.</i>

SECÇÃO 10: Estabilidade e reactividade

- **10.1 Reactividade** *Não existe mais nenhuma informação relevante disponível.*
- **10.2 Estabilidade química**
- **Decomposição térmica / condições a evitar:** *Não existe decomposição se usado de acordo com as especificações.*
- **10.3 Possibilidade de reações perigosas** *Não se conhecem reações perigosas.*
- **10.4 Condições a evitar** *Não existe mais nenhuma informação relevante disponível.*
- **10.5 Materiais incompatíveis:** *Não existe mais nenhuma informação relevante disponível.*
- **10.6 Produtos de decomposição perigosos:** *Não se conhecem produtos de decomposição perigosos.*

SECÇÃO 11: Informação toxicológica

- **11.1 Informações sobre os efeitos toxicológicos**
- **Toxicidade aguda**
Nocivo por ingestão ou inalação.
- **Efeito de irritabilidade primário:**
- **Corrosão/irritação cutânea** *Com base nos dados disponíveis, os critérios de classificação não são preenchidos.*
- **Lesões oculares graves/irritação ocular**
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Sensibilização respiratória ou cutânea**
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Avisos adicionais de toxicologia:**
- **Efeitos CMR (carcinogenicidade, mutagenicidade e efeitos tóxicos na reprodução)**
- **Mutagenicidade em células germinativas**
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Carcinogenicidade** *Com base nos dados disponíveis, os critérios de classificação não são preenchidos.*
- **Toxicidade reprodutiva**
Pode afectar o nascituro. Suspeito de afectar a fertilidade.
- **Toxicidade para órgãos-alvo específicos (STOT) - exposição única**
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Toxicidade para órgãos-alvo específicos (STOT) - exposição repetida**
Pode afectar os órgãos após exposição prolongada ou repetida.
- **Perigo de aspiração** *Com base nos dados disponíveis, os critérios de classificação não são preenchidos.*

SECÇÃO 12: Informação ecológica

- **12.1 Toxicidade**
- **Toxicidade aquática:** *Não existe mais nenhuma informação relevante disponível.*
- **12.2 Persistência e degradabilidade** *Não existe mais nenhuma informação relevante disponível.*

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- **12.3 Potencial de bioacumulação** Não existe mais nenhuma informação relevante disponível.
- **12.4 Mobilidade no solo** Não existe mais nenhuma informação relevante disponível.
- **Efeitos ecotóxicos:**
- **Observação:** Muito tóxico para os peixes.
- **Outras indicações ecológicas:**
- **Indicações gerais:**
Classe de perigo para a água 3 (D) (auto-classificação): muito perigoso para a água
Não deixar chegar às águas subterrâneas, aos cursos de água nem à canalização, nem em pequenas quantidades.
Perigo de poluição da água potável mesmo se forem derramadas quantidades muito pequenas no subsolo.
Tóxico nas águas para os peixes e para o plâncton.
muito tóxico para os organismos aquáticos
- **12.5 Resultados da avaliação PBT e mPmB**
- **PBT:** Não aplicável.
- **mPmB:** Não aplicável.
- **12.6 Outros efeitos adversos** Não existe mais nenhuma informação relevante disponível.

SECÇÃO 13: Considerações relativas à eliminação

- **13.1 Métodos de tratamento de resíduos**
- **Recomendação:** Não se pode eliminar juntamente com o lixo doméstico. Não permita que chegue à canalização.
- **Embalagens contaminadas:**
- **Recomendação:** Eliminação residual conforme o regulamento dos serviços públicos.

SECÇÃO 14: Informações relativas ao transporte

- | | |
|---|--|
| · 14.1 Número ONU | |
| · ADR, IMDG, IATA | UN2291 |
| · 14.2 Designação oficial de transporte da ONU | |
| · ADR | 2291 COMPOSTO SOLÚVEL DE CHUMBO, N.S.A. (dicitrato de trichumbo), PERIGOSO PARA O AMBIENTE |
| · IMDG | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT |
| · IATA | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate) |
| · 14.3 Classes de perigo para efeitos de transporte | |
| · ADR, IMDG | |
|  | |
| · Classe | 6.1 Matérias tóxicas |
| · Rótulo | 6.1 |
| · IATA | |
|  | |
| · Class | 6.1 Matérias tóxicas |

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· Label	6.1
· 14.4 Grupo de embalagem · ADR, IMDG, IATA	III
· 14.5 Perigos para o ambiente: · Poluente das águas: · Marcação especial (ADR):	<i>Matéria perigosa do ponto de vista do ambiente, sólida;</i> <i>Poluente das águas</i> <i>Símbolo convencional (peixes e árvore)</i> <i>Símbolo convencional (peixes e árvore)</i>
· 14.6 Precauções especiais para o utilizador · Número de identificação de perigo (N° Kemler): · N° EMS: · Segregation groups · Stowage Category	<i>Atenção: Matérias tóxicas</i> 60 6.1-04 <i>Heavy metals and their salts (including their organometallic compounds), lead and its compounds</i> A
· 14.7 Transporte a granel em conformidade com o anexo II da Convenção MARPOL e o Código IBC	<i>Não aplicável.</i>
· Transporte/outras informações:	
· ADR · Quantidades Limitadas (LQ) · Quantidades exceptuadas (EQ) · Categoria de transporte · Código de restrição em túneis	5 kg Código: E1 <i>Quantidade líquida máxima por embalagem interior: 30 g</i> <i>Quantidade líquida máxima por embalagem exterior: 1000 g</i> 2 E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5 kg Code: E1 <i>Maximum net quantity per inner packaging: 30 g</i> <i>Maximum net quantity per outer packaging: 1000 g</i>
· UN "Model Regulation":	<i>UN 2291 COMPOSTO SOLÚVEL DE CHUMBO, N.S.A. (DICITRATO DE TRICHUMBO), 6.1, III, PERIGOSO PARA O AMBIENTE</i>

SECÇÃO 15: Informação sobre regulamentação

- **15.1 Regulamentação/legislação específica para a substância ou mistura em matéria de saúde, segurança e ambiente**
- **Diretiva 2012/18/UE**
- **Substâncias perigosas designadas - ANEXO I** A substância não está listada.
- **Categoria “Seveso” E1** Perigoso para o ambiente aquático
- **Quantidades-limiar (em toneladas), para a aplicação de requisitos de nível inferior 100 t**
- **Quantidades-limiar (em toneladas), para a aplicação de requisitos de nível superior 200 t**
- **Regulamento (CE) n.º 1907/2006 ANEXO XVII** Condições de limitação: 30, 63, 72
- **Regulamento (UE) N.º 649/2012 Annex I Part 1**
- **Directiva 2011/65/UE relativa à restrição do uso de determinadas substâncias perigosas em equipamentos eléctricos e electrónicos - Anexo II**
A substância não está listada.

(continuação na página 8)

Ficha de dados de segurança
em conformidade com 1907/2006/CE, Artigo 31º

data da impressão 30.12.2021

Revisão: 30.12.2021

Nome comercial: *dicitrato de trichumbo*

(continuação da página 7)

- **REGULAMENTO (UE) 2019/1148**
- **Anexo I - PRECURSORES DE EXPLOSIVOS OBJETO DE RESTRIÇÕES (Valor-limite máximo para efeitos de licenciamento nos termos do artigo 5.o, n.o 3)**
A substância não está listada.
- **Anexo II - PRECURSORES DE EXPLOSIVOS PASSÍVEIS DE PARTICIPAÇÃO**
A substância não está listada.
- **Regulamento (CE) n.º 273/2004 relativo aos precursores de drogas** A substância não está listada.
- **Regulamento (CE) n.º 111/2005 que estabelece regras de controlo do comércio de precursores de drogas entre a Comunidade e países terceiros**
A substância não está listada.
- **15.2 Avaliação da segurança química:** Não foi realizada nenhuma Avaliação de Segurança Química.

SECÇÃO 16: Outras informações

As informações fornecidas baseiam-se no estado actual dos nossos conhecimentos, embora não representem uma garantia das propriedades do produto e não fundamentam uma relação contratual.

· **Abreviaturas e acrónimos:**

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Toxicidade aguda – Categoria 4

Repr. 1A: Toxicidade reprodutiva – Categoria 1A

STOT RE 2: Toxicidade para órgãos-alvo específicos (exposição repetida) – Categoria 2

Aquatic Acute 1: Perigoso para o ambiente aquático - perigo agudo para o ambiente aquático – Categoria 1

Aquatic Chronic 1: Perigoso para o ambiente aquático - perigo de longo prazo para o ambiente aquático – Categoria 1

Fișa cu date de securitate
conform Regulamentului (CE) nr. 1907/2006, Articolul 31

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SECȚIUNEA 1: Identificarea substanței/amestecului și a societății/întreprinderii

- **1.1 Element de identificare a produsului**
- **Denumire comercială:** Lead Citrate, Trihydrate
- **Nr. articol:** 17800, 17810
- **Numărul CAS:**
512-26-5
- **Numărul CE:**
208-141-1
- **Numărul Index:**
082-001-00-6
- **1.2 Utilizări relevante identificate ale substanței sau amestecului și utilizări contraindicate**
Nu există alte informații relevante.
- **Utilizarea materialului / a preparatului** Chimicale de laborator
- **1.3 Detalii privind furnizorul fișei cu date de securitate**
- **Producător/furnizor:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Informații asigurate de:** Product safety department
- **1.4 Număr de telefon care poate fi apelat în caz de urgență:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

SECȚIUNEA 2: Identificarea pericolelor

- **2.1 Clasificarea substanței sau a amestecului**
- **Clasificarea în conformitate cu Regulamentul (CE) nr. 1272/2008**



GHS08 pericol pentru sănătate

Repr. 1A H360Df Poate dăuna fătului. Susceptibil de a dăuna fertilității.
STOT RE 2 H373 Poate provoca leziuni ale organelor în caz de expunere prelungită sau repetată.



GHS09 mediu

Aquatic Acute 1 H400 Foarte toxic pentru mediul acvatic.
Aquatic Chronic 1 H410 Foarte toxic pentru mediul acvatic cu efecte pe termen lung.



GHS07

Acute Tox. 4 H302 Nociv în caz de înghițire.
Acute Tox. 4 H332 Nociv în caz de inhalare.

- **2.2 Elemente pentru etichetă**
- **Etichetarea în conformitate cu Regulamentul (CE) nr. 1272/2008**
Substanța este clasificată și etichetată conform regulamentului privind clasificarea, etichetarea și ambalarea (CLP).

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· **Pictograme de pericol**

GHS07 GHS08 GHS09

· **Cuvânt de avertizare Pericol**· **Fraze de pericol**

H302+H332 Nociv în caz de înghițire sau inhalare.

H360Df Poate dăuna fătului. Susceptibil de a dăuna fertilității.

H373 Poate provoca leziuni ale organelor în caz de expunere prelungită sau repetată.

H410 Foarte toxic pentru mediul acvatic cu efecte pe termen lung.

· **Fraze de precauție**

P260 Nu inspirați praful/fumul/gazul/ceața/vaporii/spray-ul.

P280 A se purta mănuși de protecție/ îmbrăcăminte de protecție/echipament de protecție a ochilor/ echipament de protecție a feței/protecție a auzului.

P301+P312 ÎN CAZ DE ÎNGHIȚIRE: sunați la un CENTRU DE INFORMARE TOXICOLOGICĂ /un medic dacă nu vă simțiți bine.

P304+P340 ÎN CAZ DE INHALARE: transportați persoana la aer liber și mențineți-o într-o poziție confortabilă pentru respirație.

P405 A se depozita sub cheie.

P501 Aruncați conținutul/containerul în acord cu regulamentele locale/regionale/naționale/internaționale.

· **Date suplimentare:**

Conține plumb. A nu se utiliza pe obiecte care pot fi mestecate sau supte de copii.

· **2.3 Alte pericole**· **Rezultatele evaluării PBT și vPvB**· **PBT:** neaplicabil· **vPvB:** neaplicabil**SECȚIUNEA 3: Compoziție/informații privind componenții**· **3.1 Caracteristici chimice: Substanțe**· **Nr. CAS/ denumire**

512-26-5 Lead Citrate, Trihydrate

· **Număr/e de identitate**· **Numărul CE:** 208-141-1· **Numărul Index:** 082-001-00-6**SECȚIUNEA 4: Măsuri de prim ajutor**· **4.1 Descrierea măsurilor de prim ajutor**· **Indicații generale:**

Simptomele de otrăvire pot apare după multe ore, din acest motiv este necesară supravegherea atentă a unui medic pentru cel puțin 48 de ore după accident.

· **după inhalare:**

Pacientul trebuie transportat într-un loc bine aerisit și cald, eventual se practică respirația artificială. Dacă neplăcerile persistă, trebuie consultat medicul.

In caz de leșin, pacientul trebuie ținut și transportat în poziție laterală cât mai stabilă.

· **după contactul cu pielea:** In general acest produs nu irită pielea.· **după contactul cu ochii:**

Este necesară spălarea ochilor cu apă curentă timp de câteva minute, ținând pleoapele complet deschise.

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- **după înghițire:** Trebuie chemat imediat medicul.
- **4.2 Cele mai importante simptome și efecte, atât acute, cât și întârziate** Nu există alte informații relevante.
- **4.3 Indicații privind orice fel de asistență medicală imediată și tratamentele speciale necesare**
Nu există alte informații relevante.

SECȚIUNEA 5: Măsuri de combatere a incendiilor

- **5.1 Mijloace de stingere a incendiilor**
- **Extinctorul potrivit:** Trebuie adoptate măsuri antiincendiu în vecinătate.
- **5.2 Pericole speciale cauzate de substanța sau amestecul în cauză** Nu există alte informații relevante.
- **5.3 Recomandări destinate pompierilor**
- **Mijloace de protecție specifice:** Trebuie folosită masca de protecție respiratorie.

SECȚIUNEA 6: Măsuri de luat în caz de dispersie accidentală

- **6.1 Precauții personale, echipament de protecție și proceduri de urgență** Nu este necesar.
- **6.2 Precauții pentru mediul înconjurător:**
In cazul accesului în rețeaua de canalizare sau de aprovizionare cu apă, trebuie informate imediat autoritățile responsabile.
Trebuie evitată infiltrarea în canalizare/ape de suprafață/ape freatice.
- **6.3 Metode și material pentru izolarea incendiilor și pentru curățenie:**
Materialul contaminat trebuie eliminat ca reziduu în conformitate cu punctul 13.
Trebuie asigurată o aerisire suficientă.
- **6.4 Trimiteri către alte secțiuni**
Pentru informații cu privire la o manipulare sigură vezi capitolul 7.
Pentru informații cu privire la echipamentul de protecție de uz personal vezi capitolul 8.
Pentru informații cu privire la reziduuri vezi capitolul 13.

SECȚIUNEA 7: Manipularea și depozitarea

- **7.1 Precauții pentru manipularea în condiții de securitate**
O aspirare adecvată a pulberilor.
Trebuie asigurată o bună aerisire/aspirare la locul de muncă.
Rezervoarele se vor deschide și manipula cu multă atenție.
- **Indicații în caz de incendiu sau explozie:** Se vor pregăti aparate de protecție respiratorie.
- **7.2 Condiții de depozitare în condiții de securitate, inclusiv eventuale incompatibilități**
- **Mod de păstrare:**
- **Condiții pentru depozite și rezervoare:** Nu sînt necesare condiții speciale.
- **Indicații cu privire la stocarea mixtă:** Nu este necesar.
- **Alte indicații cu privire la condițiile de depozitare:** Rezervoarele se vor închide ermetic.
- **7.3 Utilizare finală specifică (utilizări finale specifice)** Nu există alte informații relevante.

SECȚIUNEA 8: Controale ale expunerii/protecția personală

- **8.1 Parametri de control**
- **Indicații suplimentare privind instalațiile tehnice:** Fără date suplimentare, a se vedea punctul 7.
- **Ingredienții ale căror valori limită trebuie ținute sub control la locurile de muncă:** Nu apare.
- **Indicații suplimentare:** S-au folosit ca bază listele valabile în momentul producției.

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- **8.2 Controale ale expunerii**
- **Echipament de protecție personală:**
- **Norme generale de protecție și de igienă în timpul lucrului:**
A se ține la distanță de alimente, băuturi și furaje.
A se îndepărta imediat hainele contaminate.
A se spăla mâinile înaintea pauzelor și la terminarea lucrului.
Echipamentul de protecție se va păstra separat.
- **Mască de protecție:**
In cazul expunerilor scurte și minime se va utiliza masca; în cazul celor mai intense și de durată se va utiliza aparatul autorespirator.
- **Protecția mâinilor:**
Materialul din care sunt fabricate mănușile trebuie să fie impermeabil la aer și rezistent la produs / substanță / preparat.
În absența testelor nu pot fi date recomandări privind materialul de mănuși pentru produs / preparat / amestec chimic.
Alegerea materialului pentru mănuși se va face luându-se în considerație timpul de penetrare, rata de permeabilitate și degradarea.
- **Material pentru mănuși**
Alegerea unei mănuși potrivite depinde nu numai de material, ci și de alte caracteristici de calitate și diferă de la producător la producător.
- **Timp de penetrație al materialului pentru mănuși**
Timpul exact de penetrare trebuie aflat și respectat de către fabricantul mănușilor de protecție.
- **Protecția ochilor:** nu este necesar.

SECȚIUNEA 9: Proprietățile fizice și chimice

- **9.1 Informații privind proprietățile fizice și chimice de bază**
- **Indicații generale**
- **Aspect:**

Formă:	solid
Culoare:	Nedefinit.
- **Miros:** caracteristic
- **Pragul de acceptare a mirosului:** Nedefinit.
- **Valoare pH:** neaplicabil
- **Schimbare de stare de agregare**

Punctul de topire/punctul de înghețare:	nedefinit
Punctul inițial de fierbere și intervalul de fierbere:	nedefinit
- **Punctul de aprindere:** neaplicabil
- **Inflamabilitatea (solid, gaz):** Substanța nu este inflamabilă.
- **Temperatura de descompunere:** Nedefinit.
- **Temperatura de autoaprindere:** Nedefinit.
- **Proprietăți explozive:** Produsul nu este explozibil.
- **Limite de inflamabilitate:**

inferioară:	Nedefinit.
superioară:	Nedefinit.
- **Presiunea de vapori:** neaplicabil
- **Densitate:** Nedefinită

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· Densitatea relativă:	Nedefinit.
· Densitatea vaporilor:	neaplicabil
· Viteza de evaporare	neaplicabil
· Solubil în / amestecabil cu:	
Apa:	Nedefinit.
· Coeficientul de partiție: n-octanol/apă:	Nedefinit.
· Vâscozitatea:	
dinamică:	neaplicabil
cinematică:	neaplicabil
· 9.2 Alte informații	Nu există alte informații relevante.

SECȚIUNEA 10: Stabilitate și reactivitate

- **10.1 Reactivitate** Nu există alte informații relevante.
- **10.2 Stabilitate chimică**
- **Descompunere termică/ condiții de evitat:** Produsul nu se descompune dacă este folosit conform normelor.
- **10.3 Posibilitatea de reacții periculoase** Nu se cunosc reacții periculoase.
- **10.4 Condiții de evitat** Nu există alte informații relevante.
- **10.5 Materiale incompatibile:** Nu există alte informații relevante.
- **10.6 Produși de descompunere periculoși:** Nu sînt cunoscuți produși de descompunere periculoși.

SECȚIUNEA 11: Informații toxicologice

- **11.1 Informații privind efectele toxicologice**
- **Toxicitate acută**
Nociv în caz de înghițire sau inhalare.
- **Iritabilitate primară:**
- **Corodarea/iritarea pielii** Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite.
- **Lezarea gravă/iritarea ochilor** Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite.
- **Sensibilizarea căilor respiratorii sau a pielii**
Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite.
- **Informații cu privire la următoarele grupe de efecte posibile:**
- **Efecte CMR (efect cancerigen, mutagen și toxic pentru reproducere)**
- **Mutagenitatea celulelor germinative** Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite.
- **Cancerogenitatea** Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite.
- **Toxicitatea pentru reproducere**
Poate dăuna fătului. Susceptibil de a dăuna fertilității.
- **STOT (toxicitate asupra organelor țintă specifice) – expunere unică**
Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite.
- **STOT (toxicitate asupra organelor țintă specifice) – expunere repetată**
Poate provoca leziuni ale organelor în caz de expunere prelungită sau repetată.
- **Pericol prin aspirare** Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite.

SECȚIUNEA 12: Informații ecologice

- **12.1 Toxicitate**
- **Toxicitate acvatică:** Nu există alte informații relevante.
- **12.2 Persistență și degradabilitate** Nu există alte informații relevante.

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· **12.3 Potențial de bioacumulare** Nu există alte informații relevante.

· **12.4 Mobilitate în sol** Nu există alte informații relevante.

· **Efecte toxice pentru mediu:**

· **Observație:** Foarte otrăvitor pentru pește.

· **Alte indicații ecologice:**

· **Indicații generale:**

Clasa de pericol pentru ape 3 (Autoclasificare): foarte periculos

A nu se infiltra în apele freatică, în rețeaua de apă sau în canalizare, nici măcar în mici cantități.

Pericol pentru apele potabile chiar în cazul scurgerii unei mici cantități de produs în subsol.

Toxici pentru pești și vegetația acvatică.

foarte otrăvitor pentru organismele acvatice

· **12.5 Rezultatele evaluării PBT și vPvB**

· **PBT:** neaplicabil

· **vPvB:** neaplicabil

· **12.6 Alte efecte adverse** Nu există alte informații relevante.

SECȚIUNEA 13: Considerații privind eliminarea

· **13.1 Metode de tratare a deșeurilor**

· **Recomandare:**

Produsul nu se va îndepărta împreună cu resturile menajere. Se va evita pătrunderea în canalizare.

· **Ambalaje impure:**

· **Recomandare:** Eliminarea reziduurilor conform dispozițiilor administrative.

SECȚIUNEA 14: Informații referitoare la transport

· **14.1 Nr. UN:**

· **ADR, IMDG, IATA**

UN2291

· **14.2 Denumirea corectă ONU pentru expediție**

· **ADR**

2291 COMPUS SOLUBIL AL PLUMBULUI, N.S.A.
(Lead Citrate, Trihydrate), PERICULOS PENTRU
MEDIU

· **IMDG**

LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate,
Trihydrate), MARINE POLLUTANT

· **IATA**

LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate,
Trihydrate)

· **14.3 Clasa (clasele) de pericol pentru transport**

· **ADR, IMDG**



· **Clasa**

6.1 Substanțe toxice

· **Lista de pericol**

6.1

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· IATA



· Class 6.1 Substanțe toxice
· Label 6.1

· 14.4 Grup de ambalaj: III
· ADR, IMDG, IATA

· 14.5 Pericole pentru mediul înconjurător: Substanță solidă periculoasă pentru mediu; Marine Pollutant
· Marine Pollutant Simbol (pește și copac)
· Marcarea speciale (ADR): Simbol (pește și copac)

· 14.6 Precauții speciale pentru utilizatori Atenție: Substanțe toxice
· Număr de identificare a pericolului (Nr. Kemler): 60
· Nr. EMS: 6.1-04
· Segregation groups Heavy metals and their salts (including their organometallic compounds), lead and its compounds
· Stowage Category A

· 14.7 Transport în vrac, în conformitate cu anexa II la Convenția MARPOL și cu Codul IBC neaplicabil

· Transport/alte informații:

· ADR
· Cantități limitate / cantități limitate (LQ) 5 kg
· Cantități exceptate (EQ) Cod: E1
Cantitatea maximă netă per ambalaj interior: 30 g
Cantitatea maximă netă per ambalaj exterior: 1000 g
· Categoria de transport: 2
· Codul de restricție pentru tuneluri: E

· IMDG
· Limited quantities (LQ) 5 kg
· Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 g
Maximum net quantity per outer packaging: 1000 g

· UN "Model Regulation": UN 2291 COMPUS SOLUBIL AL PLUMBULUI, N.S.A. (LEAD CITRATE, TRIHYDRATE), 6.1, III, PERICULOS PENTRU MEDIU

SECȚIUNEA 15: Informații de reglementare

- 15.1 Regulamente/legislație în domeniul securității, sănătății și al mediului specifice (specifică) pentru substanța sau amestecul în cauză
- Directiva 2012/18/UE
- Denumirea substanțelor periculoase - ANEXA I Substanța nu este conținută.
- Categoria Seveso E1 Periculoase pentru mediul acvatic
- Cantitățile relevante (în tone) ale substanțelor pentru încadrarea amplasamentelor de nivel inferior 100 t
- Cantitățile relevante (în tone) ale substanțelor pentru încadrarea amplasamentelor de nivel superior 200 t

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- **REGULAMENTUL (CE) NR. 1907/2006 ANEXA XVII** Condiții de restricționare: 30, 63, 72
- **Regulamentul (UE) NR. 649/2012 Annex I Part 1**
- **Directiva 2011/65/UE privind restricțiile de utilizare a anumitor substanțe periculoase în echipamentele electrice și electronice - Anexa II**
Substanța nu este conținută.
- **REGULAMENTUL (UE) 2019/1148**
- **Anexa I - PRECURSORI DE EXPLOZIVI RESTRICȚIONAȚI (Valoarea-limită superioară în scopul acordării licenței în temeiul articolului 5 alineatul (3))**
Substanța nu este conținută.
- **Anexa II - PRECURSORI DE EXPLOZIVI CARE TREBUIE RAPORTAȚI** Substanța nu este conținută.
- **Regulamentul (CE) nr. 273/2004 privind precursorii drogurilor** Substanța nu este conținută.
- **Regulamentul (CE) nr. 111/2005 de stabilire a normelor de monitorizare a comerțului cu precursori de droguri între Comunitate și țările terțe**
Substanța nu este conținută.
- **15.2 Evaluarea securității chimice: Nu a fost efectuată o evaluare a securității chimice.**

SECȚIUNEA 16: Alte informații

Datele au fost raportate pe baza cunoștințelor noastre actuale, nu reprezintă totuși nici o garanție pentru caracteristicile produsului și nu motivează nici un raport juridic contractual.

Abrevieri și acronime:

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

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EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Toxicitate acută – Categoria 4

Repr. 1A: Toxicitate pentru reproducere – Categoria 1A

STOT RE 2: Toxicitate asupra unui organ țintă specific (expunere repetată) – Categoria 2

Aquatic Acute 1: Periculos pentru mediul acvatic - pericol acut pentru mediul acvatic – Categoria 1

Aquatic Chronic 1: Periculos pentru mediul acvatic - pericol pe termen lung pentru mediul acvatic – Categoria 1

Паспорт безопасности в соответствии с ГОСТ 30333-2007

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1 Идентификация химической продукции и сведения о производителе или поставщике

- **Идентификатор продукта**
- **Торговое наименование:** Lead Citrate, Trihydrate
- **Артикульный номер:** 17800, 17810
- **Номер CAS:**
512-26-5
- **Номер ЕС:**
208-141-1
- **Порядковый номер:**
082-001-00-6
- **Соответствующие установленные применения вещества или смеси и не рекомендуемые области использования**
Отсутствует какая-либо соответствующая информация.
- **Применение вещества / препарата** Лабораторные химикаты
- **Подробная информация поставщика паспорта безопасности**
- **Производитель / Поставщик:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Отдел, предоставляющий информацию:** Product safety department
- **Номер телефона экстренной связи:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Идентификация опасности (опасностей)

- **Классификация вещества или смеси**



опасность для здоровья

Репродуктивная токсичность 1A

H360 Может нанести ущерб плодовитости или нерожденному ребенку.

СТОМ - повторно 2

H373 Может наносить вред органам в результате длительного или многократного воздействия.



окружающая среда

Острая токсичность для воды 1

H400 Весьма токсично для водных организмов.

Хроническая токсичность для воды 1

H410 Весьма токсично для водных организмов с долгосрочными последствиями.



Острая токсичность 4

H302 Вредно при проглатывании.

Острая токсичность 4

H332 Наносит вред при вдыхании.

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(Продолжение страницы 1)

- **Элементы маркировки**

- **Элементы маркировки в соответствии с СГС**

Данное вещество классифицируется и маркируется в соответствии с Согласованной на глобальном уровне системой классификации и маркировки химических веществ (GHS).

- **Пиктограммы, обозначающие опасности**



GHS07 GHS08 GHS09

- **Сигнальное слово** *Опасно*

- **Предупреждения об опасности**

Опасно при проглатывании или при вдыхании.

Может нанести ущерб плодovitости или нерожденному ребенку.

Может нанести вред органам в результате длительного или многократного воздействия.

Весьма токсично для водных организмов с долгосрочными последствиями.

- **Меры предосторожности**

Избегать вдыхание пыли/дыма/газа/тумана/паров/распылителей жидкости.

Пользоваться защитными перчатками/защитной одеждой/ средствами защиты глаз/лица.

ПРИ ПРОГЛАТЫВАНИИ: Обратиться в ТОКСИКОЛОГИЧЕСКИЙ ЦЕНТР/ к врачу при плохом самочувствии.

ПРИ ВДЫХАНИИ: Вынести пострадавшего на свежий воздух и обеспечить ему полный покой в удобном для дыхания положении.

Хранить под замком.

Утилизировать содержимое / тару в соответствии с местными / региональными / национальными / международными предписаниями.

- **Другие опасные факторы**

- **Результаты оценки PBT (устойчивое биоаккумулятивное токсическое вещество) и vPvB (очень устойчивое биоаккумулятивное вещество)**

- **PBT:** *Неприменимо.*

- **vPvB:** *Неприменимо.*

3 Состав (информация о компонентах)

- **Химическая характеристика: Вещества**

- **Обозначение номера CAS**

512-26-5 Lead Citrate, Trihydrate

- **Идентификационный (-ые) номер (-а)**

- **Номер ЕС:** *208-141-1*

- **Порядковый номер:** *082-001-00-6*

4 Меры первой помощи

- **Описание мер первой медицинской помощи**

- **Общие указания:**

Симптомы отравления могут проявиться даже спустя много часов, поэтому имеется необходимость в медицинском надзоре в течение как минимум 48 часов после аварии (несчастного случая).

- **После вдыхания:**

Обеспечить доступ свежего воздуха. При необходимости сделать искусственное дыхание. Держать пациента в тепле. Если симптомы не проходят, обратиться к врачу.

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При потере сознания (обморочном состоянии) положить пациента на бок в стабильном положении для транспортировки.

- **После контакта с кожей:** Как правило, продукт не оказывает раздражающего воздействия на кожу.
- **После контакта с глазами:** Промыть открытый глаз под проточной водой в течение нескольких минут.
- **После проглатывания:** Немедленно вызвать врача.
- **Указания для врача:**
- **Наиболее важные симптомы и эффекты, как немедленные, так и проявляющиеся впоследствии**
Отсутствует какая-либо соответствующая информация.
- **Указание на необходимость оперативной медицинской помощи и специального режима**
Отсутствует какая-либо соответствующая информация.

5 Меры и средства обеспечения пожаровзрывобезопасности

- **Средства пожаротушения**
- **Надлежащие средства тушения:**
Предпринять меры по тушению пожара, соответствующие окружающим условиям.
- **Особые опасности, создаваемые веществом или смесью**
Отсутствует какая-либо соответствующая информация.
- **Рекомендации для пожарных**
- **Защитное оснащение:** Применение устройства защиты дыхательных путей.

6 Меры по предотвращению и ликвидации аварийных и чрезвычайных ситуаций и их последствий

- **Меры по обеспечению личной безопасности, защитное снаряжение и порядок действий в чрезвычайной ситуации**
Не требуется.
- **Меры по защите окружающей среды:**
При попадании в водоёмы или в канализационную систему проинформировать об этом соответствующие службы.
Не допускать попадания в канализационную систему / поверхностные или грунтовые воды.
- **Методы и материалы для локализации и очистки:**
Утилизировать заражённый материал как отходы в соответствии с Пунктом 13.
Обеспечить достаточную вентиляцию.
- **Ссылки на другие разделы**
Информация по безопасному обращению - в Главе 7.
Информация по индивидуальному защитному снаряжению - в Главе 8.
Информация по утилизации - в Главе 13.

7 Правила хранения химической продукции и обращения с ней при погрузочно-разгрузочных работах

- **Обращение с веществом:**
- **Меры предосторожности по безопасному обращению**
Тщательное удаление пыли.
Обеспечить хорошую вентиляцию / вытяжку на рабочем месте.
Соблюдать осторожность при открывании ёмкостей и при обращении с ними.
- **Указания по защите от пожаров и взрывов:** Держать наготове устройство защиты органов дыхания.

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- **Условия безопасного хранения, включая несовместимости**
- **Хранение:**
- **Требования, предъявляемые к складским помещениям и таре:**
Никаких особенных требований не предъявляется.
- **Указания по совместимости с другими веществами при хранении:** Не требуется.
- **Дальнейшие данные по условиям хранения:** Держать ёмкости плотно закрытыми.
- **Характерное конечное применение (или применения)**
Отсутствует какая-либо соответствующая информация.

8 Средства контроля за опасным воздействием и средства индивидуальной защиты

- **Дополнительные указания по структуре технических устройств:**
Никаких дополнительных данных; см. Пункт 7.
- **Параметры контроля**
- **Составляющие компоненты с предельными значениями, требующие мониторинга на рабочих местах:**
Не требуется.
- **Дополнительные указания:**
В качестве основы послужили списки, являвшиеся на момент составления актуальными.
- **Требования по охране труда и меры по обеспечению безопасности персонала**
- **Средства индивидуальной защиты:**
- **Общие меры по защите от воздействия и гигиене:**
Держать подальше от продуктов питания, напитков и корма для животных.
Немедленно снять всю загрязнённую и пропитанную вредными веществами одежду.
Мыть руки перед перерывами и по окончании работы.
Хранить защитную одежду отдельно.
- **Защита органов дыхания:**
При кратковременном контакте с веществом или при воздействии вещества низкой концентрации пользоваться фильтрующим устройством для защиты органов дыхания. При интенсивном или более продолжительном контакте следует воспользоваться автономным устройством защиты органов дыхания.
- **Защита рук:**
Материал перчаток / рукавиц должен быть устойчивым к воздействию продукта / вещества / препарата и не пропускать их.
Никаких рекомендаций в отношении материала перчаток / рукавиц, пригодных для применения в ходе работы с продуктом / препаратом / смесью химикатов дать нельзя, так как никаких испытаний в этом отношении не проводилось.
Выбор материала перчаток / рукавиц производится с учётом времени прорыва, степени проницаемости и эрозии.
- **Материал перчаток / рукавиц**
Выбор подходящих перчаток / рукавиц определяется не только материалом, но также и другими качественными особенностями, причём между различными производителями существует большая разница.
- **Период проницаемости материала перчаток / рукавиц.**
Необходимо осведомиться у производителя защитных перчаток / рукавиц о точном времени прорыва и придерживаться его.
- **Защита глаз:** Не требуется.

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9 Физико-химические свойства

· Информация по основным физическим и химическим свойствам	
· Общая информация	
· Внешний вид:	
Форма:	<i>Твёрдое</i>
Цвет:	<i>Не определено.</i>
· Запах:	<i>Характерно</i>
· Порог запаха:	<i>Не определено.</i>
· Значение pH:	<i>Неприменимо.</i>
· Изменение состояния	
Точка плавления / интервал температур плавления:	<i>Не определено.</i>
Точка кипения / интервал температур кипения:	<i>Не определено.</i>
· Температурная точка вспышки:	<i>Неприменимо.</i>
· Воспламеняемость (твёрдое, газообразное вещество):	<i>Вещество является невоспламеняемым.</i>
· Температура распада:	<i>Не определено.</i>
· Самовоспламеняемость:	<i>Не определено.</i>
· Взрывоопасность:	<i>Продукт не является взрывоопасным.</i>
· Границы взрываемости:	
Нижняя:	<i>Не определено.</i>
Верхняя:	<i>Не определено.</i>
· Давление пара:	<i>Неприменимо.</i>
· Плотность:	<i>Не определено.</i>
· Относительная плотность	<i>Не определено.</i>
· Плотность пара	<i>Неприменимо.</i>
· Скорость испарения	<i>Неприменимо.</i>
· Растворимость в / Смешиваемость с водой:	<i>Не определено.</i>
· Коэффициент распределения (n-октанол / вода):	<i>Не определено.</i>
· Вязкость:	
Динамическая:	<i>Неприменимо.</i>
Кинематическая:	<i>Неприменимо.</i>
· Другая информация	<i>Отсутствует какая-либо соответствующая информация.</i>

10 Стабильность и реакционная способность

- **Реакционная способность** *Отсутствует какая-либо соответствующая информация.*
- **Химическая стабильность**
- **Термический распад / условия, которых следует избегать:**
При использовании в соответствии с предписаниями не происходит никакого распада.
- **Возможность опасных реакций** *Неизвестно ни о каких опасных реакциях.*
- **Условия, вызывающие опасные изменения** *Отсутствует какая-либо соответствующая информация.*
- **Несовместимые материалы:** *Отсутствует какая-либо соответствующая информация.*

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· **Опасные продукты распада:** *Неизвестно ни о каких опасных продуктах распада.*

11 Информация о токсичности

- **Информация по токсикологическому воздействию**
- **Острая токсичность:**
- **Первичное раздражающее воздействие:**
- **на кожу:** *Нет раздражающего воздействия.*
- **на глаза:** *Нет раздражающего воздействия.*
- **Сенсибилизация:** *Неизвестно о наличии сенсибилизирующего воздействия.*
- **Информация по следующим группам потенциальных воздействий:**
- **Канцерогенное, изменяющее наследственность и вызывающее бесплодие действие**
Репродуктивная токсичность 1A

12 Информация о воздействии на окружающую среду

- **Токсичность**
- **Акватоксичность:** *Отсутствует какая-либо соответствующая информация.*
- **Стойкость и склонность к деградации** *Отсутствует какая-либо соответствующая информация.*
- **Поведение в экологических системах:**
- **Биоаккумулятивный потенциал** *Отсутствует какая-либо соответствующая информация.*
- **Подвижность в грунте** *Отсутствует какая-либо соответствующая информация.*
- **Экотоксические воздействия:**
- **Примечания:** *Очень ядовито для рыб.*
- **Дополнительные экологические указания:**
- **Общие указания:**
Класс вредности для воды 3 (Само-классификация): очень вредно для воды
Не допускать попадания продукта в грунтовые воды, водоёмы или в канализационную систему, даже в малых количествах.
Вред для питьевой воды при попадании под землю даже минимальных количеств.
В водоёмах ядовито также для рыб и планктона.
Очень ядовито для водных организмов.
- **Результаты оценки РВТ (устойчивое биоаккумулятивное токсическое вещество) и vPvB (очень устойчивое биоаккумулятивное вещество)**
- **РВТ:** *Неприменимо.*
- **vPvB:** *Неприменимо.*
- **Другие вредные эффекты** *Отсутствует какая-либо соответствующая информация.*

13 Рекомендации по удалению отходов (остатков)

- **Методы обработки отходов**
- **Рекомендация:**
Утилизация совместно с бытовыми отходами недопустима. Не допускать попадания в канализацию.
- **Неочищенные упаковки:**
- **Рекомендация:**
Утилизация должна быть осуществлена в соответствии с предписаниями компетентных служб.

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(Продолжение на странице 7)

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14 Информация при перевозках (транспортировании)

<ul style="list-style-type: none"> · Номер UN · ADR, IMDG, IATA 	UN2291
<ul style="list-style-type: none"> · Собственное транспортное наименование ООН · ADR · IMDG · IATA 	2291 СВИНЦА СОЕДИНЕНИЕ РАСТВОРИМОЕ, Н.У.К. (<i>Lead Citrate, Trihydrate</i>), ОПАСНОЕ ДЛЯ ОКРУЖАЮЩЕЙ СРЕДЫ LEAD COMPOUND, SOLUBLE, N.O.S. (<i>Lead Citrate,</i> <i>Trihydrate</i>), MARINE POLLUTANT LEAD COMPOUND, SOLUBLE, N.O.S. (<i>Lead Citrate,</i> <i>Trihydrate</i>)
<ul style="list-style-type: none"> · классов опасности транспорта · ADR, IMDG 	
<ul style="list-style-type: none"> · Класс · Этикетка для опасного содержимого 	6.1 Токсичные вещества 6.1
<ul style="list-style-type: none"> · IATA 	
<ul style="list-style-type: none"> · Class · Label 	6.1 Токсичные вещества 6.1
<ul style="list-style-type: none"> · Группа упаковки · ADR, IMDG, IATA 	III
<ul style="list-style-type: none"> · Экологические риски: · Загрязнитель морской среды: · Особые отметки (ADR): 	Вещество твёрдое, опасное для окружающей среды; загрязнитель морской среды Символ (рыба и дерево) Символ (рыба и дерево)
<ul style="list-style-type: none"> · Особые меры предосторожности для пользователей · Идентификационный номер опасности (Код опасности по Кемлеру): · Номер EMS: · Segregation groups · Stowage Category 	Осторожно: Токсичные вещества 60 6.1-04 <i>Heavy metals and their salts (including their organometallic compounds), lead and its compounds</i> A
<ul style="list-style-type: none"> · Транспортировка навалом в соответствии с Приложением II MARPOL73/78 (Международная конвенция по предотвращению загрязнения вод с судов) и IBC Code (Международный кодекс перевозок опасных химических грузов наливом) 	Неприменимо.

(Продолжение на странице 8)

Паспорт безопасности
в соответствии с ГОСТ 30333-2007

Дата печати: 30.12.2021

Дата редактирования: 30.12.2021

Торговое наименование: Lead Citrate, Trihydrate

(Продолжение страницы 7)

· Транспорт / дополнительная информация:

· ADR

- **Ограниченные объёмы (LQ)**
- **Освобожденные количества (EQ)**

5 кг

Код: E1

Максимальное количество нетто на внутреннюю тару: 30 г

Максимальное количество нетто на наружную тару: 1000 г

· Транспортная категория

2

· Код ограничения проезда через туннели

E

· IMDG

- **Limited quantities (LQ)**
- **Excerpted quantities (EQ)**

5 кг

Code: E1

Maximum net quantity per inner packaging: 30 г

Maximum net quantity per outer packaging: 1000 г

· UN "Model Regulation":

UN 2291 СВИНЦА СОЕДИНЕНИЕ РАСТВОРИМОЕ,
Н.У.К. (LEAD CITRATE, TRIHYDRATE), 6.1, III,
ОПАСНОЕ ДЛЯ ОКРУЖАЮЩЕЙ СРЕДЫ

15 Информация о национальном и международном законодательстве

- **Нормы безопасности, правила охраны труда и экологические нормативы или стандарты, действующие для вещества или смеси**
Отсутствует какая-либо соответствующая информация.
- **Элементы маркировки в соответствии с СГС**
Данное вещество классифицируется и маркируется в соответствии с Согласованной на глобальном уровне системой классификации и маркировки химических веществ (GHS).
- **Пиктограммы, обозначающие опасности**



GHS07 GHS08 GHS09

- **Сигнальное слово** Опасно
- **Предупреждения об опасности**
Опасно при проглатывании или при вдыхании.
Может нанести ущерб плодородности или нерожденному ребенку.
Может наносить вред органам в результате длительного или многократного воздействия.
Весьма токсично для водных организмов с долгосрочными последствиями.
- **Меры предосторожности**
Избегать вдыхание пыли/дыма/газа/тумана/паров/распылителей жидкости.
Пользоваться защитными перчатками/защитной одеждой/средствами защиты глаз/лица.
ПРИ ПРОГЛАТЫВАНИИ: Обратиться в ТОКСИКОЛОГИЧЕСКИЙ ЦЕНТР/ к врачу при плохом самочувствии.
ПРИ ВДЫХАНИИ: Вынести пострадавшего на свежий воздух и обеспечить ему полный покой в удобном для дыхания положении.
Хранить под замком.
Утилизировать содержимое / тару в соответствии с местными / региональными / национальными / международными предписаниями.

(Продолжение на странице 9)

RU

**Паспорт безопасности
в соответствии с ГОСТ 30333-2007**

Дата печати: 30.12.2021

Дата редактирования: 30.12.2021

Торговое наименование: Lead Citrate, Trihydrate

(Продолжение страницы 8)

· **Оценка химической безопасности:** Оценка химической безопасности не проведена.**16 Дополнительная информация**

Данные опираются на актуальные знания, однако они не являются гарантией каких-либо конкретных свойств продукта и не устанавливают никаких действующих с юридической точки зрения договорных отношений.

· **Контактная информация:**· **Аббревиатуры и акронимы:**

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

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Острая токсичность 4: Acute toxicity – Category 4

Репродуктивная токсичность 1A: Reproductive toxicity – Category 1A

СТОМ - повторно 2: Specific target organ toxicity (repeated exposure) – Category 2

Острая токсичность для воды 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Хроническая токсичность для воды 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

RU

Karta bezpečnostných údajov podľa 1907/2006/ES, Článok 31

Dátum tlače: 30.12.2021

Revízia: 30.12.2021

ODDIEL 1: Identifikácia látky/zmesi a spoločnosti/podniku

- **1.1 Identifikátor produktu**
- **Obchodný názov:** Lead Citrate, Trihydrate
- **Číslo artikla:** 17800, 17810
- **Číslo CAS:**
512-26-5
- **Číslo EC:**
208-141-1
- **Indexové číslo:**
082-001-00-6
- **1.2 Relevantné identifikované použitia látky alebo zmesi a použitia, ktoré sa neodporúčajú**
Nie sú k dispozícii žiadne ďalšie relevantné informácie.
- **Použitie materiálu /zmesi** Laboratórne chemikálie
- **1.3 Údaje o dodávateľovi karty bezpečnostných údajov**
- **Výrobca/dodávateľ:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Informačné oddelenie:** Product safety department
- **1.4 Núdzové telefónne číslo:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

ODDIEL 2: Identifikácia nebezpečnosti

- **2.1 Klasifikácia látky alebo zmesi**
- **Klasifikácia v súlade s nariadením (ES) č. 1272/2008**



GHS08 nebezpečnosť pre zdravie

Repr. 1A H360Df Môže poškodiť nenarodené dieťa. Podozrenie z poškodzovania plodnosti.
STOT RE 2 H373 Môže spôsobiť poškodenie orgánov pri dlhšej alebo opakovanej expozícii.



GHS09 životné prostredie

Aquatic Acute 1 H400 Veľmi toxický pre vodné organizmy.
Aquatic Chronic 1 H410 Veľmi toxický pre vodné organizmy, s dlhodobými účinkami.



GHS07

Acute Tox. 4 H302 Škodlivý po požití.
Acute Tox. 4 H332 Škodlivý pri vdýchnutí.

- **2.2 Prvky označovania**
- **Označovanie v súlade s nariadením (ES) č. 1272/2008**
Tento materiál je klasifikovaný a označený podľa noriem CLP.

(pokračovanie na strane 2)

Karta bezpečnostných údajov

podľa 1907/2006/ES, Článok 31

Dátum tlače: 30.12.2021

Revízia: 30.12.2021

Obchodný názov: Lead Citrate, Trihydrate

(pokračovanie zo strany 1)

· Výstražné piktogramy



GHS07 GHS08 GHS09

· Výstražné slovo Nebezpečenstvo

· Výstražné upozornenia

H302+H332 Zdraviu škodlivý pri požití alebo vdýchnutí.

H360Df Môže poškodiť nenarodené dieťa. Podozrenie z poškodzovania plodnosti.

H373 Môže spôsobiť poškodenie orgánov pri dlhšej alebo opakovanej expozícii.

H410 Veľmi toxický pre vodné organizmy, s dlhodobými účinkami.

· Bezpečnostné upozornenia

P260 Nevdychujte prach/dym/plyn/hmlu/pary/aerosóly.

P280 Noste ochranné rukavice/ochranný odev/ochranné okuliare/ochranu tváre/prostriedky na ochranu sluchu.

P301+P312 PO POŽITÍ: Pri zdravotných problémoch volajte NÁRODNÉ TOXIKOLOGICKÉ INFORMAČNÉ CENTRUM/lekára.

P304+P340 PO VDÝCHNUTÍ: Presuňte osobu na čerstvý vzduch a umožnite jej pohodlne dýchať.

P405 Uchovávajte uzamknuté.

P501 Zneškodnenie obsahu/obalu v súlade s miestnymi/oblastnými/národnými/medzinárodnými nariadeniami.

· Ďalšie údaje:

Obsahuje olovo. Nepoužívajte na povrchy, ktoré by mohli žuť alebo obližovať deti.

· 2.3 Iná nebezpečnosť

· Výsledky posúdenia PBT a vPvB

· **PBT:** Nepoužiteľný

· **vPvB:** Nepoužiteľný

ODDIEL 3: Zloženie/informácie o zložkách

· 3.1 Chemická charakteristika: Látky

· Označenie č. CAS (Chemical Abstracts Service)

512-26-5 Lead Citrate, Trihydrate

· Identifikačné číslo (čísla)

· Číslo EC: 208-141-1

· Indexové číslo: 082-001-00-6

ODDIEL 4: Opatrenia prvej pomoci

· 4.1 Opis opatrení prvej pomoci

· Všeobecné inštrukcie:

Príznaky otravy sa môžu prejaviť až po mnohých hodinách, z toho dôvodu je nevyhnutný lekársky dohľad minimálne počas 48 hodín po nehode.

· Po vdýchnutí:

Prívod čerstvého vzduchu, prípadne umelé dýchanie, teplo. V prípade pretrvávajúcich ťažkostí konzultovať s lekárom.

V prípade bezvedomia uloženie a preprava v stabilizovanej polohe naboku.

· **Po kontakte s pokožkou:** Vo všeobecnosti výrobok nemá dráždiaci účinok na pokožku.

· **Po kontakte s očami:** Oči s otvorenými viečkami vyplachovať niekoľko minút prúdom tečúcej vody.

· **Po prehltnutí:** Okamžite vyhľadať lekára.

(pokračovanie na strane 3)

Karta bezpečnostných údajov

podľa 1907/2006/ES, Článok 31

Dátum tlače: 30.12.2021

Revízia: 30.12.2021

Obchodný názov: Lead Citrate, Trihydrate

(pokračovanie zo strany 2)

- **4.2 Najdôležitejšie príznaky a účinky, akútne aj oneskorené**
Nie sú k dispozícii žiadne ďalšie relevantné informácie.
- **4.3 Údaj o akejkoľvek potrebe okamžitej lekárskej starostlivosti a osobitného ošetrovania**
Nie sú k dispozícii žiadne ďalšie relevantné informácie.

ODDIEL 5: Protipožiarne opatrenia

- **5.1 Hasiace prostriedky**
- **Vhodné hasiace prostriedky:** Hasiace opatrenia prispôbiť podmienkam prostredia.
- **5.2 Osobitné ohrozenia vyplývajúce z látky alebo zo zmesi**
Nie sú k dispozícii žiadne ďalšie relevantné informácie.
- **5.3 Rady pre požiarnikov**
- **Zvláštne ochranné prostriedky:** Nasadiť ochrannú dýchaciu masku.

ODDIEL 6: Opatrenia pri náhodnom uvoľnení

- **6.1 Osobné bezpečnostné opatrenia, ochranné vybavenie a núdzové postupy** Nevyžaduje sa.
- **6.2 Bezpečnostné opatrenia pre životné prostredie:**
V prípade prieniku do vodných zdrojov alebo do kanalizácie upovedomiť príslušné úrady.
Nepripustiť prienik do kanalizácie/povrchových vôd/spodných vôd.
- **6.3 Metódy a materiál na zabránenie šíreniu a vyčistenie:**
Kontaminovaný materiál likvidovať ako odpad podľa bodu 13.
Zabezpečiť dostatočné vetranie.
- **6.4 Odkaz na iné oddiely**
Informácie o bezpečnej manipulácii pozri kapitola 7.
Informácie o osobných ochranných prostriedkoch pozri kapitolu 8.
Informácie o likvidácii pozri kapitolu 13.

ODDIEL 7: Zaobchádzanie a skladovanie

- **7.1 Bezpečnostné opatrenia na bezpečné zaobchádzanie**
Poriadne odprašiť.
Zabezpečiť dostatočné vetranie/odsávanie na pracovisku.
Opatrne otvárať a manipulovať s nádržami.
- **Inštrukcie na ochranu pred vznikom požiaru a výbuchu:** Prístroje na ochranu dychu v pohotovosti.
- **7.2 Podmienky bezpečného skladovania vrátane akejkoľvek nekompatibility**
- **Skladovanie:**
- **Požiadavky na skladovacie priestory a nádrže:** Žiadne mimoriadne požiadavky.
- **Inštrukcie ohľadne spoločného skladovania:** nevyžaduje sa
- **Ďalšie inštrukcie o podmienkach skladovania:** Nádrže udržiavajte nepriedušne uzavreté.
- **7.3 Špecifické konečné použitie, resp. použitia** Nie sú k dispozícii žiadne ďalšie relevantné informácie.

ODDIEL 8: Kontroly expozície/osobná ochrana

- **8.1 Kontrolné parametre**
- **Ďalšie upozornenia týkajúce sa usporiadania technických zariadení:** Žiadne ďalšie údaje, pozri bod 7.
- **Súčasť kontrolovaných medzných hodnôt súvisiacich s pracoviskom:** odpadá
- **Ďalšie upozornenia:** Ako podklad slúžili pri výrobe platné zoznamy.

(pokračovanie na strane 4)

Karta bezpečnostných údajov

podľa 1907/2006/ES, Článok 31

Dátum tlače: 30.12.2021

Revízia: 30.12.2021

Obchodný názov: Lead Citrate, Trihydrate

(pokračovanie zo strany 3)

- **8.2 Kontroly expozície**
- **Osobné ochranné prostriedky:**
- **Všeobecné ochranné a hygienické opatrenia:**
*Skladovať oddelene od potravín, nápojov a krmovín.
 Znečistené, nasiaknuté časti odevu okamžite vyzliecť.
 Pred prestávkami a po ukončení práce umyť ruky.
 Oddelené skladovanie ochranného odevu.*
- **Ochrana dýchania:**
Pri krátkodobom alebo nepatrnom vplyve filtračný dýchací prístroj; v prípade intenzívnejšej resp. dlhodobej expozície použiť ochranný dýchací prístroj nezávislý od okolitého ovzdušia.
- **Ochrana rúk:**
*Materiál rukavíc musí byť nepriepustný a odolný voči produktu/ materiálu / zmesi.
 Na základe chýbajúcich testov nemôže byť vydané žiadne odporúčanie na vhodný materiál na rukavice v súvislosti s produktom/ prípravkom / zmesou chemikálií.
 Výber materiálu na rukavice pri zohľadnení jeho popraskania, prestupu látky membránami, znehodnotenia*
- **Materiál rukavíc**
Voľba vhodnej rukavice nezávisí iba od materiálu, ale aj od ďalších kvalitatívnych znakov a je odlišná pri každom výrobcovi.
- **Penetračný čas materiálu rukavíc** *U výrobcu rukavíc zistiť presný čas lá mavosti materiálu a dodržiavať ho.*
- **Ochrana očí:** *nevyžaduje sa.*

ODDIEL 9: Fyzikálne a chemické vlastnosti

- **9.1 Informácie o základných fyzikálnych a chemických vlastnostiach**
- **Všeobecné údaje**
- **Vzhľad:**

Forma:	pevné
Farba:	Neurčené.
- **Zápach:** charakteristický
- **Prahová hodnota zápachu:** Neurčené.
- **hodnota pH:** Nepoužiteľný
- **Zmena skupenstva**

Teplota topenia/tuhnutia:	Neurčený
Počiatočná teplota varu a destilačný rozsah:	neurčený
- **Teplota vzplanutia:** Nepoužiteľný
- **Horľavosť (tuhá látka, plyn):** Látka nie je zápalná.
- **Teplota rozkladu:** Neurčené.
- **Teplota samovznietenia:** Neurčené.
- **Výbušné vlastnosti:** Produkt nie je nebezpečný z hľadiska výbušnosti.
- **Rozsah výbušnosti:**

Spodná:	Neurčené.
Horná:	Neurčené.
- **Tlak pary:** Nepoužiteľný
- **Hustota:** Neurčený
- **Relatívna hustota** Neurčené.
- **Hustota pár:** Nepoužiteľný

(pokračovanie na strane 5)

Karta bezpečnostných údajov

podľa 1907/2006/ES, Článok 31

Dátum tlače: 30.12.2021

Revízia: 30.12.2021

Obchodný názov: Lead Citrate, Trihydrate

(pokračovanie zo strany 4)

· Rýchlosť odparovania	Nepoužiteľný
· Rozpustnosť v / miešateľnosť s Voda:	Neurčené.
· Rozdeľovací koeficient: n-oktanol/voda:	Neurčené.
· Viskozita: Dynamická:	Nepoužiteľný
Kinematická:	Nepoužiteľný
· 9.2 Iné informácie	Nie sú k dispozícii žiadne ďalšie relevantné informácie.

ODDIEL 10: Stabilita a reaktivita

- **10.1 Reaktivita** Nie sú k dispozícii žiadne ďalšie relevantné informácie.
- **10.2 Chemická stabilita**
- **Termický rozklad / podmienky na zabránenie rozkladu:** Žiadny rozklad pri použití v zmysle určenia.
- **10.3 Možnosť nebezpečných reakcií** Nie sú známe žiadne nebezpečné reakcie.
- **10.4 Podmienky, ktorým sa treba vyhnúť** Nie sú k dispozícii žiadne ďalšie relevantné informácie.
- **10.5 Nekompatibilné materiály:** Nie sú k dispozícii žiadne ďalšie relevantné informácie.
- **10.6 Nebezpečné produkty rozkladu:** nie sú známe žiadne nebezpečné produkty rozkladu.

ODDIEL 11: Toxikologické informácie

- **11.1 Informácie o toxikologických účinkoch**
- **Akútna toxicita**
Zdraviu škodlivý pri požití alebo vdýchnutí.
- **Primárny dráždiaci účinok:**
- **Poleptanie kože/podráždenie kože** Na základe dostupných údajov nie sú kritériá klasifikácie splnené.
- **Vážne poškodenie očí/podráždenie očí** Na základe dostupných údajov nie sú kritériá klasifikácie splnené.
- **Respiračná alebo kožná senzibilizácia** Na základe dostupných údajov nie sú kritériá klasifikácie splnené.
- **Ďalšie toxikologické inštrukcie:**
- **Účinky CMR (karcinogénnosť, mutagénnosť a reprodukčná toxicita)**
- **Mutagenita zárodočných buniek** Na základe dostupných údajov nie sú kritériá klasifikácie splnené.
- **Karcinogenita** Na základe dostupných údajov nie sú kritériá klasifikácie splnené.
- **Reprodukčná toxicita**
Môže poškodiť nenarodené dieťa. Podozrenie z poškodzovania plodnosti.
- **Toxicita pre špecifický cieľový orgán (STOT) – jednorazová expozícia**
Na základe dostupných údajov nie sú kritériá klasifikácie splnené.
- **Toxicita pre špecifický cieľový orgán (STOT) – opakovaná expozícia**
Môže spôsobiť poškodenie orgánov pri dlhšej alebo opakovanej expozícii.
- **Aspiračná nebezpečnosť** Na základe dostupných údajov nie sú kritériá klasifikácie splnené.

ODDIEL 12: Ekologické informácie

- **12.1 Toxicita**
- **Vodná toxicita:** Nie sú k dispozícii žiadne ďalšie relevantné informácie.
- **12.2 Perzistencia a degradovateľnosť** Nie sú k dispozícii žiadne ďalšie relevantné informácie.
- **12.3 Bioakumulačný potenciál** Nie sú k dispozícii žiadne ďalšie relevantné informácie.
- **12.4 Mobilita v pôde** Nie sú k dispozícii žiadne ďalšie relevantné informácie.

(pokračovanie na strane 6)

Karta bezpečnostných údajov

podľa 1907/2006/ES, Článok 31

Dátum tlače: 30.12.2021

Revízia: 30.12.2021

Obchodný názov: Lead Citrate, Trihydrate



(pokračovanie zo strany 5)

- **Ekotoxické účinky:**
- **Poznámka:** Veľmi jedovatý pre ryby.
- **Ďalšie ekologické údaje:**
- **Všeobecné údaje:**
Trieda ohrozenia vodných zdrojov 3 (vlastné zatriedenie): intenzívne ohrozuje vodné zdroje
Nedopustiť prienik do podzemných vôd, povrchových vôd a kanalizácie, a to ani v malých množstvách.
Ohrozenie pitnej vody už v prípade úniku nepatrného množstva do podložia.
Vo vodách taktiež jedovaté pre ryby a planktón.
veľmi jedovatý pre vodné organizmy
- **12.5 Výsledky posúdenia PBT a vPvB**
- **PBT:** Nepoužiteľný
- **vPvB:** Nepoužiteľný
- **12.6 Iné nepriaznivé účinky** Nie sú k dispozícii žiadne ďalšie relevantné informácie.

ODDIEL 13: Opatrenia pri zneškodňovaní

- **13.1 Metódy spracovania odpadu**
- **Odporúčanie:** Nesmie sa likvidovať spolu s domovým odpadom. Nepripustiť prienik do kanalizácie.
- **Nevyčistené obaly:**
- **Odporúčanie:** Likvidácia v zmysle úradných predpisov.

ODDIEL 14: Informácie o doprave

- | | |
|---|--|
| · 14.1 Číslo OSN | |
| · ADR, IMDG, IATA | UN2291 |
| · 14.2 Správne expedičné označenie OSN | |
| · ADR | 2291 ZLÚČENINA OLOVA, ROZPUSTNÁ, I. N. (Lead Citrate, Trihydrate), OHROZUJÚCA ŽIVOTNÉ PROSTREDIE |
| · IMDG | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT |
| · IATA | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate) |
| · 14.3 Trieda, resp. triedy nebezpečnosti pre dopravu | |
| · ADR, IMDG | |
|  | |
| · Trieda | 6.1 Jedovaté látky |
| · Pokyny pre prípad nehody | 6.1 |
| · IATA | |
|  | |
| · Class | 6.1 Jedovaté látky |

(pokračovanie na strane 7)

Karta bezpečnostných údajov

podľa 1907/2006/ES, Článok 31

Dátum tlače: 30.12.2021

Revízia: 30.12.2021

Obchodný názov: Lead Citrate, Trihydrate

(pokračovanie zo strany 6)

· Label	6.1
· 14.4 Obalová skupina · ADR, IMDG, IATA	III
· 14.5 Nebezpečnosť pre životné prostredie: · Marine pollutant (Námorný znečisťovateľ): · Osobitné označenie (ADR):	Látky ohrozujúce životné prostredie, pevné; Marine Pollutant Symbol (ryby a strom) Symbol (ryby a strom)
· 14.6 Osobitné bezpečnostné opatrenia pre užívateľa · Id. číslo nebezpečnosti (Kemlerovo číslo): · Číslo EMS: · Segregation groups · Stowage Category	Pozor: Jedovaté látky 60 6.1-04 Heavy metals and their salts (including their organometallic compounds), lead and its compounds A
· 14.7 Doprava hromadného nákladu podľa prílohy II k dohovoru MARPOL a Kódexu IBC	Nepoužiteľný
· Preprava/d'alšie údaje:	
· ADR · Obmedzené množstvá (LQ): · Vyňaté množstvá (EQ)	5 kg Kód: E1 Najväčšie čisté množstvo na vnútorný obal: 30 g Najväčšie čisté množstvo na vonkajší obal: 1000 g
· Prevozná skupina · Tunelový obmedzovací kód	2 E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN "Model Regulation":	UN 2291 ZLÚČENINA OLOVA, ROZPUSTNÁ, I. N. (LEAD CITRATE, TRIHYDRATE), 6.1, III, OHROZUJÚCA ŽIVOTNÉ PROSTREDIE

ODDIEL 15: Regulačné informácie

- **15.1 Nariadenia/právne predpisy špecifické pre látku alebo zmes v oblasti bezpečnosti, zdravia a životného prostredia**
- **Rady 2012/18/EÚ**
- **Menované nebezpečné látky - PRÍLOHA I** Látka nie je obsiahnutá
- **Kategória podľa Seveso E1** Nebezpečné pre vodné prostredie
- **Kvalifikačné množstvo (v tonách) na uplatnenie požiadaviek nižšej úrovne** 100 t
- **Kvalifikačné množstvo (v tonách) na uplatnenie požiadaviek vyššej úrovne** 200 t
- **Rady (ES) č. 1907/2006 PRÍLOHA XVII** Podmienky obmedzenia: 30, 63, 72
- **Rady (EÚ) č. 649/2012 Annex I Part 1**
- **Smernica 2011/65/EÚ o obmedzení používania určitých nebezpečných látok v elektrických a elektronických zariadeniach - Príloha II**
Látka nie je obsiahnutá

(pokračovanie na strane 8)

Karta bezpečnostných údajov

podľa 1907/2006/ES, Článok 31

Dátum tlače: 30.12.2021

Revízia: 30.12.2021

Obchodný názov: Lead Citrate, Trihydrate

(pokračovanie zo strany 7)

- **NARIADENIE (EÚ) 2019/1148**
- **Príloha I - OBMEDZENÉ PREKURZORY VÝBUŠNÍN (Horná prahová hodnota na účely vydávania povolení podľa článku 5 ods. 3)**
Látka nie je obsiahnutá
- **Príloha II - PREKURZORY VÝBUŠNÍN PODLIEHAJÚCE OHLASOVANIU** Látka nie je obsiahnutá
- **Nariadenie (ES) č. 273/2004 o prekurzoch drog** Látka nie je obsiahnutá
- **Nariadenie (ES) č. 111/2005 ktorým sa stanovujú pravidlá sledovania obchodu s drogovými prekurzormi medzi Spoločenstvom a tretími krajinami**
Látka nie je obsiahnutá
- **15.2 Hodnotenie chemickej bezpečnosti: Hodnotenie chemickej bezpečnosti nebolo vykonané.**

ODDIEL 16: Iné informácie

Údaje sa opierajú o dnešný stav našich vedomostí, nepredstavujú však záruku vlastností produktu a nezakladajú zmluvný právny vzťah.

· **Skratky a akronymy:**

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Akútna toxicita – Kategória 4

Repr. 1A: Reprodukčná toxicita – Kategória 1A

STOT RE 2: Toxicita pre špecifický cieľový orgán (opakovaná expozícia) – Kategória 2

Aquatic Acute 1: Nebezpečnosť pre vodné prostredie - akútna nebezpečnosť pre vodné prostredie – Kategória 1

Aquatic Chronic 1: Nebezpečnosť pre vodné prostredie - dlhodobá nebezpečnosť pre vodné prostredie – Kategória 1

Ficha de datos de seguridad

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SECCIÓN 1: Identificación de la sustancia o la mezcla y de la sociedad o la empresa

· 1.1 Identificador del producto

· **Nombre comercial:** dicitrato de triplomo

· **Número del artículo:** 17800, 17810

· **Número CAS:**

512-26-5

· **Número CE:**

208-141-1

· **Número de clasificación:**

082-001-00-6

· **1.2 Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados**

No existen más datos relevantes disponibles.

· **Utilización del producto / de la elaboración** Sustancias químicas de laboratorio

· **1.3 Datos del proveedor de la ficha de datos de seguridad**

· **Fabricante/distribuidor:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: info@emsdiasum.com

www.emsdiasum.com

Aname

C/ Perez Galdos no. 2

28693 Quijorna

Madrid, Spain

Tel: +34.91.816.89.50

Fax: +34.91.816.85.94

email: ventas@aname.es

· **Área de información:** Product safety department

· **1.4 Teléfono de emergencia:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

SECCIÓN 2: Identificación de los peligros

· **2.1 Clasificación de la sustancia o de la mezcla**

· **Clasificación con arreglo al Reglamento (CE) n° 1272/2008**



GHS08 peligro para la salud

Repr. 1A H360Df Puede dañar al feto. Se sospecha que perjudica a la fertilidad.

STOT RE 2 H373 Puede provocar daños en los órganos tras exposiciones prolongadas o repetidas.



GHS09 medio ambiente

Aquatic Acute 1 H400 Muy tóxico para los organismos acuáticos.

Aquatic Chronic 1 H410 Muy tóxico para los organismos acuáticos, con efectos nocivos duraderos.

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GHS07

Acute Tox. 4 H302 Nocivo en caso de ingestión.
 Acute Tox. 4 H332 Nocivo en caso de inhalación.

- **2.2 Elementos de la etiqueta**
- **Etiquetado con arreglo al Reglamento (CE) n° 1272/2008**
 La sustancia se ha clasificado y etiquetado de conformidad con el reglamento CLP.
- **Pictogramas de peligro**



GHS07 GHS08 GHS09

- **Palabra de advertencia Peligro**
- **Indicaciones de peligro**
 H302+H332 Nocivo en caso de ingestión o inhalación.
 H360Df Puede dañar al feto. Se sospecha que perjudica a la fertilidad.
 H373 Puede provocar daños en los órganos tras exposiciones prolongadas o repetidas.
 H410 Muy tóxico para los organismos acuáticos, con efectos nocivos duraderos.
- **Consejos de prudencia**
 P260 No respirar el polvo/el humo/el gas/la niebla/los vapores/el aerosol.
 P280 Llevar guantes/ropa de protección/equipo de protección para los ojos/la cara/los oídos.
 P301+P312 EN CASO DE INGESTIÓN: Llamar a un CENTRO DE TOXICOLOGÍA/médico si la persona se encuentra mal.
 P304+P340 EN CASO DE INHALACIÓN: Transportar a la persona al aire libre y mantenerla en una posición que le facilite la respiración.
 P405 Guardar bajo llave.
 P501 Eliminar el contenido o el recipiente conforme a la reglamentación local/regional/nacional/internacional.
- **Datos adicionales:**
 Contiene plomo. No utilizar en objetos que los niños puedan masticar o chupar.
- **2.3 Otros peligros**
- **Resultados de la valoración PBT y mPmB**
- **PBT:** No aplicable.
- **mPmB:** No aplicable.

SECCIÓN 3: Composición/información sobre los componentes

- **3.1 Caracterización química: Sustancias**
- **Denominación N° CAS**
 512-26-5 dicitrato de triplomo
- **Número(s) de identificación**
- **Número CE:** 208-141-1
- **Número de clasificación:** 082-001-00-6

ES

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SECCIÓN 4: Primeros auxilios

· 4.1 Descripción de los primeros auxilios

· Instrucciones generales:

Los síntomas de intoxicación pueden presentarse después de muchas horas, por lo que se requiere una supervisión médica durante un mínimo de 48 horas después del accidente.

· En caso de inhalación del producto:

Suministrar aire fresco; eventualmente hacer respiración artificial, calor. Si los trastornos persisten, consultar al médico.

Las personas desmayadas deben tenderse y transportarse de lado con la suficiente estabilidad.

· En caso de contacto con la piel: Por regla general, el producto no irrita la piel.

· En caso de con los ojos: Limpiar los ojos abiertos durante varios minutos con agua corriente.

· En caso de ingestión: Consultar inmediatamente un médico.

· 4.2 Principales síntomas y efectos, agudos y retardados No existen más datos relevantes disponibles.

· 4.3 Indicación de toda atención médica y de los tratamientos especiales que deban dispensarse inmediatamente

No existen más datos relevantes disponibles.

SECCIÓN 5: Medidas de lucha contra incendios

· 5.1 Medios de extinción

· Sustancias extintoras apropiadas: Combatir los incendios con medidas adaptados al ambiente circundante.

· 5.2 Peligros específicos derivados de la sustancia o la mezcla No existen más datos relevantes disponibles.

· 5.3 Recomendaciones para el personal de lucha contra incendios

· Equipo especial de protección: Colocarse la protección respiratoria.

SECCIÓN 6: Medidas en caso de vertido accidental

· 6.1 Precauciones personales, equipo de protección y procedimientos de emergencia No es necesario.

· 6.2 Precauciones relativas al medio ambiente:

Al penetrar en las aguas o en el alcantarillado, avisar a las autoridades pertinentes.

Evitar que penetre en la canalización /aguas de superficie /agua subterráneas.

· 6.3 Métodos y material de contención y de limpieza:

Desechar el material contaminado como vertido según ítem 13.

Asegurar suficiente ventilación.

· 6.4 Referencia a otras secciones

Ver capítulo 7 para mayor información sobre una manipulación segura.

Ver capítulo 8 para mayor información sobre el equipo personal de protección.

Para mayor información sobre cómo desechar el producto, ver capítulo 13.

SECCIÓN 7: Manipulación y almacenamiento

· 7.1 Precauciones para una manipulación segura

Desempolvar cuidadosamente.

Asegurar suficiente ventilación /aspiración en el puesto de trabajo.

Abrir y manejar el recipiente con cuidado.

· Prevención de incendios y explosiones: Tener preparados los aparatos respiratorios.

· 7.2 Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades

· Almacenamiento:

· Exigencias con respecto al almacén y los recipientes: No se requieren medidas especiales.

· Normas en caso de un almacenamiento conjunto: No es necesario.

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- **Indicaciones adicionales sobre las condiciones de almacenamiento:**
Mantener el recipiente cerrado herméticamente.
- **7.3 Usos específicos finales** *No existen más datos relevantes disponibles.*

SECCIÓN 8: Controles de exposición/protección individual

- **8.1 Parámetros de control**
- **Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**
Sin datos adicionales, ver punto 7.
- **Componentes con valores límite admisibles que deben controlarse en el puesto de trabajo:** *Nulo.*
- **Indicaciones adicionales:** *Como base se han utilizado las listas vigentes en el momento de la elaboración.*
- **8.2 Controles de la exposición**
- **Equipo de protección individual:**
- **Medidas generales de protección e higiene:**
*Mantener alejado de alimentos, bebidas y alimentos para animales.
Quitarse de inmediato la ropa ensuciada o impregnada.
Lavarse las manos antes de las pausas y al final del trabajo.
Guardar la ropa protectora por separado.*
- **Protección respiratoria:**
Si la exposición va a ser breve o de poca intensidad, colocarse una máscara respiratoria. Para una exposición más intensa o de mayor duración, usar un aparato de respiración autónomo.
- **Protección de manos:**
*El material del guante deberá ser impermeable y resistente al producto / sustancia / preparado.
Ante la ausencia de tests específicos, no se puede recomendar ningún material específico para guantes de protección contra el producto / preparado / mezcla de sustancias químicas.
Selección del material de los guantes en función de los tiempos de rotura, grado de permeabilidad y degradación.*
- **Material de los guantes**
La elección del guante adecuado no depende únicamente del material, sino también de otras características de calidad, que pueden variar de un fabricante a otro.
- **Tiempo de penetración del material de los guantes**
El tiempo de resistencia a la penetración exacto deberá ser pedido al fabricante de los guantes. Este tiempo debe ser respetado.
- **Protección de ojos:** *No es necesario.*

SECCIÓN 9: Propiedades físicas y químicas

- **9.1 Información sobre propiedades físicas y químicas básicas**
- **Datos generales**
- **Aspecto:**
- **Forma:** *Sólido*
- **Color:** *No determinado.*
- **Olor:** *Característico*
- **Umbral olfativo:** *No determinado.*
- **valor pH:** *No aplicable.*
- **Cambio de estado**
- **Punto de fusión/punto de congelación:** *Indeterminado.*
- **Punto inicial de ebullición e intervalo de ebullición:** *Indeterminado.*
- **Punto de inflamación:** *No aplicable.*

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· Inflamabilidad (sólido, gas):	<i>La sustancia no es inflamable.</i>
· Temperatura de descomposición:	<i>No determinado.</i>
· Temperatura de auto-inflamación:	<i>No determinado.</i>
· Propiedades explosivas:	<i>El producto no es explosivo.</i>
· Límites de explosión:	
Inferior:	<i>No determinado.</i>
Superior:	<i>No determinado.</i>
· Presión de vapor:	<i>No aplicable.</i>
· Densidad:	<i>Indeterminado.</i>
· Densidad relativa	<i>No determinado.</i>
· Densidad de vapor	<i>No aplicable.</i>
· Tasa de evaporación:	<i>No aplicable.</i>
· Solubilidad en / miscibilidad con agua:	<i>No determinado.</i>
· Coefficiente de reparto: n-octanol/agua:	<i>No determinado.</i>
· Viscosidad:	
Dinámica:	<i>No aplicable.</i>
Cinemática:	<i>No aplicable.</i>
· 9.2 Otros datos	<i>No existen más datos relevantes disponibles.</i>

SECCIÓN 10: Estabilidad y reactividad

- **10.1 Reactividad** *No existen más datos relevantes disponibles.*
- **10.2 Estabilidad química**
- **Descomposición térmica / condiciones que deben evitarse:** *No se descompone al emplearse adecuadamente.*
- **10.3 Posibilidad de reacciones peligrosas** *No se conocen reacciones peligrosas.*
- **10.4 Condiciones que deben evitarse** *No existen más datos relevantes disponibles.*
- **10.5 Materiales incompatibles:** *No existen más datos relevantes disponibles.*
- **10.6 Productos de descomposición peligrosos:** *No se conocen productos de descomposición peligrosos.*

SECCIÓN 11: Información toxicológica

- **11.1 Información sobre los efectos toxicológicos**
- **Toxicidad aguda**
Nocivo en caso de ingestión o inhalación.
- **Efecto estimulante primario:**
- **Corrosión o irritación cutáneas** *A la vista de los datos disponibles, no se cumplen los criterios de clasificación.*
- **Lesiones o irritación ocular graves**
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Sensibilización respiratoria o cutánea**
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Indicaciones toxicológicas adicionales:**
- **Efectos CMR (carcinogenicidad, mutagenicidad y toxicidad para la reproducción)**
- **Mutagenicidad en células germinales**
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Carcinogenicidad** *A la vista de los datos disponibles, no se cumplen los criterios de clasificación.*

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- **Toxicidad para la reproducción**
Puede dañar al feto. Se sospecha que perjudica a la fertilidad.
- **Toxicidad específica en determinados órganos (STOT) – exposición única**
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad específica en determinados órganos (STOT) – exposición repetida**
Puede provocar daños en los órganos tras exposiciones prolongadas o repetidas.
- **Peligro de aspiración** *A la vista de los datos disponibles, no se cumplen los criterios de clasificación.*

SECCIÓN 12: Información ecológica

- **12.1 Toxicidad**
- **Toxicidad acuática:** *No existen más datos relevantes disponibles.*
- **12.2 Persistencia y degradabilidad** *No existen más datos relevantes disponibles.*
- **12.3 Potencial de bioacumulación** *No existen más datos relevantes disponibles.*
- **12.4 Movilidad en el suelo** *No existen más datos relevantes disponibles.*
- **Efectos ecotóxicos:**
- **Observación:** *Muy tóxico para peces.*
- **Indicaciones medioambientales adicionales:**
- **Indicaciones generales:**
Nivel de riesgo para el agua 3 (autoclasiificación): muy peligroso para el agua
No dejar que se infiltre en aguas subterráneas, aguas superficiales o en alcantarillados, ni siquiera en pequeñas cantidades.
Una cantidad ínfima vertida en el subsuelo ya representa un peligro para el agua potable.
Vertido en aguas superficiales, también es tóxico para los peces y el plancton.
muy tóxico para organismos acuáticos
- **12.5 Resultados de la valoración PBT y mPmB**
- **PBT:** *No aplicable.*
- **mPmB:** *No aplicable.*
- **12.6 Otros efectos adversos** *No existen más datos relevantes disponibles.*

SECCIÓN 13: Consideraciones relativas a la eliminación

- **13.1 Métodos para el tratamiento de residuos**
- **Recomendación:** *No debe desecharse con la basura doméstica. No debe llegar al alcantarillado.*
- **Embalajes sin limpiar:**
- **Recomendación:** *Eliminar conforme a las disposiciones oficiales.*

SECCIÓN 14: Información relativa al transporte

- **14.1 Número ONU**
- **ADR, IMDG, IATA** UN2291
- **14.2 Designación oficial de transporte de las Naciones Unidas**
- **ADR** 2291 COMPUESTO DE PLOMO, SOLUBLE, N.E.P.
(dicitrato de triplomo), PELIGROSO PARA EL MEDIO
AMBIENTE
- **IMDG** LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate,
Trihydrate), MARINE POLLUTANT
- **IATA** LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate,
Trihydrate)

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· 14.3 Clase(s) de peligro para el transporte

· ADR, IMDG



· Clase

6.1 Materias tóxicas

· Etiqueta

6.1

· IATA



· Class

6.1 Materias tóxicas

· Label

6.1

· 14.4 Grupo de embalaje

· ADR, IMDG, IATA

III

· 14.5 Peligros para el medio ambiente:

Sustancia sólida potencialmente peligrosas para el medio ambiente; Contaminante marino

· Contaminante marino:

Símbolo (pez y árbol)

· Marcado especial (ADR):

Símbolo (pez y árbol)

· 14.6 Precauciones particulares para los usuarios

Atención: Materias tóxicas

· Número de identificación de peligro (Número Kemler):

60

· Número EMS:

6.1-04

· Segregation groups

Heavy metals and their salts (including their organometallic compounds), lead and its compounds

· Stowage Category

A

· 14.7 Transporte a granel con arreglo al anexo II del Convenio MARPOL y el Código IBC

No aplicable.

· Transporte/datos adicionales:

· ADR

· Cantidades limitadas (LQ)

5 kg

· Cantidades exceptuadas (EQ)

Código: E1

Cantidad neta máxima por envase interior: 30 g

Cantidad neta máxima por embalaje exterior: 1000 g

· Categoría de transporte

2

· Código de restricción del túnel

E

· IMDG

· Limited quantities (LQ)

5 kg

· Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

(se continua en página 8)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 30.12.2021

Revisión: 30.12.2021

Nombre comercial: *dicitrato de triplomo*

(se continua en página 7)

· "Reglamentación Modelo" de la UNECE: UN 2291 COMPUESTO DE PLOMO, SOLUBLE, N.E.P. (DICITRATO DE TRIPLOMO), 6.1, III, PELIGROSO PARA EL MEDIO AMBIENTE

SECCIÓN 15: Información reglamentaria

- **15.1 Reglamentación y legislación en materia de seguridad, salud y medio ambiente específicas para la sustancia o la mezcla**
- **Directiva 2012/18/UE**
- **Sustancias peligrosas nominadas - ANEXO I** No contiene la sustancia.
- **Categoría Seveso E1** Peligroso para el medio ambiente acuático
- **Cantidad umbral (toneladas) a efectos de aplicación de los requisitos de nivel inferior** 100 t
- **Cantidad umbral (toneladas) a efectos de aplicación de los requisitos de nivel superior** 200 t
- **REGLAMENTO (CE) n° 1907/2006 ANEXO XVII** Restricciones: 30, 63, 72
- **Reglamento (UE) No 649/2012 Annex I Part 1**
- **Directiva 2011/65/UE sobre restricciones a la utilización de determinadas sustancias peligrosas en aparatos eléctricos y electrónicos - Anexo II**
No contiene la sustancia.
- **REGLAMENTO (UE) 2019/1148**
- **Anexo I - PRECURSORES DE EXPLOSIVOS RESTRINGIDOS (Valor límite superior a efectos de la concesión de licencias con arreglo al artículo 5, apartado 3)**
No contiene la sustancia.
- **Anexo II - PRECURSORES DE EXPLOSIVOS NOTIFICABLES** No contiene la sustancia.
- **Reglamento (CE) no 273/2004 sobre precursores de drogas** No contiene la sustancia.
- **Reglamento (CE) N o 111/2005 por el que establecen normas para la vigilancia del comercio de precursores de drogas entre la Comunidad y terceros países**
No contiene la sustancia.
- **15.2 Evaluación de la seguridad química:** Una evaluación de la seguridad química no se ha llevado a cabo.

SECCIÓN 16: Otra información

Los datos se fundan en el estado actual de nuestros conocimientos, pero no constituyen garantía alguna de cualidades del producto y no generan ninguna relación jurídica contractual.

· Abreviaturas y acrónimos:

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
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Acute Tox. 4: Toxicidad aguda – Categoría 4
 Repr. 1A: Toxicidad para la reproducción – Categoría 1A
 STOT RE 2: Toxicidad específica en determinados órganos (exposiciones repetidas) – Categoría 2
 Aquatic Acute 1: Peligroso para el medio ambiente acuático - peligro acuático agudo – Categoría 1
 Aquatic Chronic 1: Peligroso para el medio ambiente acuático - peligro acuático a largo plazo – Categoría 1

แผ่นข้อมูลความปลอดภัย

มาตรฐาน GHS

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1 การปงชี้สารเดี่ยวหรือสารผสม และผู้ผลิต

- 1.1 ลักษณะเฉพาะของผลิตภัณฑ์
- ชื่อทางการค้า Lead Citrate, Trihydrate
- เลขที่รายชื่อ 17800, 17810
- เลขที่ CAS: 512-26-5
- จำนวน EC: 208-141-1
- เลขที่ EU: 082-001-00-6
- 1.2 สารหรือสารผสมที่เกี่ยวข้องที่ระบุให้ใช้และที่ไม่ควรให้ใช้ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- การประยุกต์ใช้สาร/ การทำ เคมีภัณฑ์ห้องทดลอง
- 1.3 รายละเอียดของผู้จัดหาข้อมูลด้านความปลอดภัย
- ผู้ผลิต/ ผู้จัดหา
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- ข้อมูลรายละเอียดเพิ่มเติมหาได้จาก Product safety department
- 1.4 หมายเลขโทรศัพท์ฉุกเฉิน:
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 การปงชี้ความเป็นอันตราย

- 2.1 การจำแนกประเภทของสารหรือสารผสม
- การแบ่งประเภทตามข้อบังคับของ CLP เลขที่ 1272/2008



สิ่งอันตรายต่อสุขภาพ

Repr. 1A H360Df May damage the unborn child. Suspected of damaging fertility.

STOT RE 2 H373 อาจเป็นสาเหตุทำให้อวัยวะเสียหายจากการสัมผัสเป็นเวลานานหรือซ้ำๆ



สิ่งแวดล้อม

Aquatic Acute 1 H400 มีพิษมากต่อสิ่งมีชีวิตในน้ำ

Aquatic Chronic 1 H410 มีพิษมากต่อสิ่งมีชีวิตในน้ำพร้อมผลกระทบระยะยาว



Acute Tox. 4 H302 เป็นอันตรายหากกลืนเข้าไป

Acute Tox. 4 H332 ให้โทษหากสูดหายใจเข้า

- 2.2 องค์ประกอบของฉลาก
- ฉลากตามระเบียบ (EC) เลขที่ 1272/2008 สารได้รับการจัดประเภทและติดฉลากตามข้อบังคับของ CLP

(ต่อที่หน้า 2)

TH

แผนข้อมูลความปลอดภัย

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ชื่อทางการค้า Lead Citrate, Trihydrate

(ต่อหน้า 1)

· ภาพสัญลักษณ์ที่เป็นอันตราย



GHS07 GHS08 GHS09

· สัญญาการค้า อันตราย

· ประกาศสิ่งที่เป็นอันตราย

H302+H332 อันตรายหากมีการกลืนกิน หรือ หากมีการสูดดม.

H360Df May damage the unborn child. Suspected of damaging fertility.

H373 อาจเป็นสาเหตุทำให้อวัยวะเสียหายจากการสัมผัสเป็นเวลานานหรือซ้ำๆ

H410 มีพิษมากต่อสิ่งมีชีวิตในน้ำพร้อมผลกระทบระยะยาว

· ประกาศการป้องกันระดับระวังภัย

P260 ห้ามสูดหายใจเอาฝุ่น/ ไอสาร/ แกส/ หมอก/ไอ/ ละอองฟุ้ง

P280 สวมถุงมือป้องกัน/เสื้อผ้าป้องกัน/ที่ป้องกันตา/ที่ป้องกันหน้า

P301+P312 หากกลืนลงไป: โทรศัพทถึงศูนย์พิษวิทยา/แพทย์ หากท่านรู้สึกไม่สบาย

P304+P340 หากสูดดมเข้าไป: ย้ายบุคคลไปยังที่ที่มีอากาศบริสุทธิ์ และหายใจได้สะดวก

P405 เก็บในที่ใส่กุญแจมิด

P501 ทิ้งสิ่งที่บรรจุ/ภาชนะที่บรรจุตามกฎหมายของท้องถิ่น/แคว้น/ในประเทศ/ระหว่างประเทศ

· ข้อมูลรายละเอียดเสริม

Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.

· 2.3 อันตรายอื่นๆ

· ผลของ PBT และการประเมิน vPvB

· PBT: ไม่สามารถใช้ได้

· vPvB: ไม่สามารถใช้ได้

3 องค์ประกอบและข้อมูลเกี่ยวกับส่วนผสม

· 3.1 คุณลักษณะทางเคมีรสารสาร

· การระบุเลขที่ CAS

512-26-5 Lead Citrate, Trihydrate

· เลขที่ที่ระบุ

· จำนวน EC: 208-141-1

· เลขที่ EU: 082-001-00-6

4 มาตรการปฐมพยาบาล

· 4.1 คำอธิบายถึงมาตรการปฐมพยาบาล

· ข้อมูลรายละเอียดทั่วไป

อาการจากพิษอาจเกิดขึ้นหลังจากนั้นหลายชั่วโมงดังนั้นจะต้องเฝ้าติดตามดูอาการทางการแพทย์อย่างน้อย 48 ชั่วโมงหลังจากอุบัติเหตุ

· หลังจากการสูดหายใจเข้าไป

หาบริเวณที่มีอากาศบริสุทธิ์หากจำเป็นให้ใช้เครื่องช่วยหายใจให้คนไข้อยู่ในบริเวณที่อากาศบริสุทธิ์หากอาการยังไม่บรรเทา

ในกรณีที่คนไข้ไม่รู้สึกตัวให้ขนย้ายคนไข้อย่างมั่นคงในท่าตะแคงด้านข้าง

· หลังจากการสัมผัสผิวหนัง

โดยทั่วๆ ไปผลิตภัณฑ์ไม่ก่อความระคายเคืองต่อผิวหนัง

· หลังจากการสัมผัสสูดดม

ชะตาที่เปิดอยู่ใต้น้ำที่กำลั้งไหลเป็นเวลาหลายนาที

· หลังจากการกลืนเข้าไป:

พบแพทย์โดยทันที

· 4.2 อาการสำคัญส่วนใหญ่และผลกระทบ ทั้งชนิดเฉียบพลันและค่อยๆ แสดงอาการ

ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

(ต่อหน้า 3)

TH

แผนข้อมูลความปลอดภัย

มาตรฐาน GHS

วันที่พิมพ์ 2021.12.30

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ชื่อทางการค้า Lead Citrate, Trihydrate

(ต่อหน้า 2)

- 4.3 ข้อบ่งชี้ของอาการที่ต้องเข้ารับการรักษามาจากแพทย์ทันทีและการบำบัดพิเศษที่จำเป็น ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

5 มาตรการพญเพลิง

- 5.1 สารที่ใช้ดับเพลิง
- สารดับเพลิงที่เหมาะสม ใช้วิธีดับเพลิงที่เหมาะสมกับสภาพแวดล้อม
- 5.2 อันตรายเฉพาะอย่างที่เกิดจากสารหรือส่วนผสม ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 5.3 คำแนะนำสำหรับพนักงานดับเพลิง
- อุปกรณ์ป้องกันภัย อุปกรณ์ป้องกันซึ่งเหมาะสำหรับการหายใจทางปาก

6 มาตรการจัดการเมื่อมีการหกรั่วไหลของสาร

- 6.1 การป้องกันส่วนบุคคล อุปกรณ์ป้องกัน และขั้นตอนดำเนินการเมื่อเกิดกรณีฉุกเฉิน ไม่ได้กำหนด
- 6.2 การให้ความคุ้มครองสิ่งแวดล้อมล่วงหน้า: แจ้งผู้มีอำนาจที่เกี่ยวข้องในกรณีที่เกิดการไหลซึมเข้าสู่น้ำหรือระบบระบายน้ำ อย่าปล่อยให้เข้าไปในท่อน้ำทิ้ง/ น้ำบนดินหรือใต้ดิน
- 6.3 วิธีดำเนินการและวัสดุสำหรับการบรรจุและการทำความสะอาด: ทิ้งวัสดุที่ปนเปื้อนเป็นของเสียตามรายการในบัญชี 13 ตรวจสอบให้แน่ใจว่ามีภาชนะบรรจุอากาศที่ตีพอ
- 6.4 การอ้างอิงถึงส่วนอื่น ดูข้อมูลรายละเอียดเรื่องความปลอดภัยในการขนถ่ายจากส่วนที่ 7 ดูข้อมูลรายละเอียดเรื่องอุปกรณ์ป้องกันส่วนบุคคลจากส่วนที่ 8 ดูข้อมูลรายละเอียดเรื่องการกำจัดจากส่วนที่ 13

7 การขนถ่าย เคลื่อนย้าย ใช้งาน และเก็บรักษา

- 7.1 การป้องกันล่วงหน้าสำหรับการจัดการด้านความปลอดภัย กำจัดฝุ่นให้หมด ทำให้แน่ใจว่าสถานที่ทำงานมีการระบายอากาศ/ ไอเสียที่ดี เปิดและถือภาชนะรองรับอย่างระมัดระวัง
- ข้อมูลรายละเอียดเกี่ยวกับการป้องกันอัคคีภัยและการระเบิด เก็บอุปกรณ์ป้องกันสำหรับการช่วยหายใจให้มีพร้อมใช้งาน
- 7.2 เงื่อนไขในการเก็บรักษาอย่างปลอดภัย, รวมถึงสิ่งที่เข้ากันไม่ได้ใดๆ
- การจัดเก็บ
- ข้อกำหนดที่ต้องปฏิบัติตามสำหรับห้องเก็บและภาชนะบรรจุ ไม่มีข้อกำหนดพิเศษ
- ข้อมูลรายละเอียดด้านการจัดเก็บในสถานที่จัดเก็บรวม ไม่ได้กำหนด
- ข้อมูลรายละเอียดเพิ่มเติมด้านสภาพการจัดเก็บ เก็บโดยปิดผนึกอย่างแน่นหนา
- 7.3 การระบุถึงการสิ้นสุดการใช้ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

8 การควบคุมการสัมผัสสัมผัสและการป้องกันส่วนบุคคล

- 8.1 การควบคุมตัวแปร
- ข้อมูลรายละเอียดเสริมสำหรับการออกแบบสิ่งอำนวยความสะดวกทางเทคนิค ไม่มีข้อมูลนอกเหนือจากนี้ดูรายการ 7
- ส่วนผสมพร้อมค่าขอบเขตที่ต้องเฝ้าดูในสถานที่ปฏิบัติงาน ไม่ได้กำหนด
- ข้อมูลรายละเอียดเสริม รายการถูกต้องระหว่างที่จัดทำโดยอาศัยการใช้งานเป็นหลัก

(ต่อหน้า 4)

TH

แผนข้อมูลความปลอดภัย

มาตรฐาน GHS

วันที่พิมพ์ 2021.12.30

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ชื่อทางการค้า Lead Citrate, Trihydrate

(ต่อหน้า 3)

- 8.2 การควบคุมการสัมผัส
- อุปกรณ์ป้องกันภัยส่วนบุคคล
- มาตรการการป้องกันและสุขอนามัยทั่วไป
 - เก็บให้ห่างจากสิ่งของที่เป็นอาหาร เครื่องดื่ม และอาหารสัตว์
 - ให้ถอดเสื้อผ้าที่เปื้อนและเช็ดออกทันที
 - ล้างมือก่อนที่จะหยุดพักและเมื่อสิ้นสุดเวลาทำงาน
 - เก็บชุดป้องกันแยกต่างหาก
- การป้องกันการสูดหายใจเข้าไป
 - ในกรณีที่อยู่เป็นเวลาสั้นหรืออากาศเป็นพิษระดับต่ำ ใช้หน้ากากกรองเพื่อช่วยหายใจในกรณีที่มีความเข้มข้นสูงหรืออยู่เป็นเวลานาน ให้ใช้เครื่องป้องกันที่มีอุปกรณ์ช่วยหายใจในตัว
- การป้องกันมือ
 - วัสดุของถุงมือจะต้องไม่ให้อากาศผ่านเข้าออกและทนทานต่อผลิตภัณฑ์/ สาร/ การผลิต
 - เนื่องจากขาดการทดสอบจึงไม่มีคำแนะนำสำหรับวัสดุที่ใช้ทำถุงมือสำหรับผลิตภัณฑ์/ การผลิต/ ของผสมเคมี
 - เลือกวัสดุสำหรับถุงมือโดยพิจารณาจากเวลาที่ใช้ในการซึมผ่านอัตราการแพร่และการเสื่อม
- วัสดุที่ใช้ทำถุงมือ
 - การเลือกใช้ถุงมือที่เหมาะสมไม่เพียงแต่ขึ้นอยู่กับวัสดุแต่ยังขึ้นกับมาตรฐานด้านคุณภาพและข้อแตกต่างระหว่างผู้ผลิตแต่ละแห่ง
- เวลาที่ใช้ในการทะลุผ่านวัสดุที่ใช้ทำถุงมือ
 - ผู้ผลิตถุงมือป้องกันจะต้องทดสอบหาเวลาแน่นอนที่ใช้ในการทะลุผ่านและจะต้องมีการตรวจสอบติดตาม
- การป้องกันตา ไม่ได้กำหนด

9 คุณสมบัติทางกายภาพและทางเคมี

<ul style="list-style-type: none"> · 9.1 ข้อมูลคุณสมบัติพื้นฐานทางกายภาพและเคมี · ข้อมูลรายละเอียดทั่วไป · ลักษณะ : <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">รูปสีฐาน</td> <td>ของแข็ง</td> </tr> <tr> <td>กลิ่นกลิ่นกลิ่น</td> <td>ไม่ได้กำหนดไว้.</td> </tr> <tr> <td>· เกณฑ์กลิ่น :</td> <td>ลักษณะพิเศษ</td> </tr> <tr> <td></td> <td>ไม่ได้กำหนดไว้.</td> </tr> </table> 	รูปสีฐาน	ของแข็ง	กลิ่นกลิ่นกลิ่น	ไม่ได้กำหนดไว้.	· เกณฑ์กลิ่น :	ลักษณะพิเศษ		ไม่ได้กำหนดไว้.	
รูปสีฐาน	ของแข็ง								
กลิ่นกลิ่นกลิ่น	ไม่ได้กำหนดไว้.								
· เกณฑ์กลิ่น :	ลักษณะพิเศษ								
	ไม่ได้กำหนดไว้.								
ค่าค่า pH	ไม่สามารถใช้ได้								
<ul style="list-style-type: none"> · การเปลี่ยนสภาวะ <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">จุดหลอมเหลว/ ขอบเขตการหลอมละลาย</td> <td>ไม่ได้กำหนด</td> </tr> <tr> <td>จุดเดือด/ ขอบเขตการเดือด</td> <td>ไม่ได้กำหนด</td> </tr> </table> 	จุดหลอมเหลว/ ขอบเขตการหลอมละลาย	ไม่ได้กำหนด	จุดเดือด/ ขอบเขตการเดือด	ไม่ได้กำหนด					
จุดหลอมเหลว/ ขอบเขตการหลอมละลาย	ไม่ได้กำหนด								
จุดเดือด/ ขอบเขตการเดือด	ไม่ได้กำหนด								
· จุดวาบไฟ	ไม่สามารถใช้ได้								
· ความสามารถติดไฟ (ของแข็งแกส)	ผลิตภัณฑ์ไม่ไวไฟ								
· อุณหภูมิละลายตัว	ไม่ได้กำหนดไว้.								
· การเผาไหม้ด้วยตัวเอง	ไม่ได้กำหนดไว้.								
· อันตรายจากการระเบิด	ผลิตภัณฑ์ไม่มีอันตรายจากการระเบิด								
<ul style="list-style-type: none"> · ขอบเขตการระเบิด <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">ขั้นต่ำ</td> <td>ไม่ได้กำหนดไว้.</td> </tr> <tr> <td>ขั้นสูง</td> <td>ไม่ได้กำหนดไว้.</td> </tr> </table> 	ขั้นต่ำ	ไม่ได้กำหนดไว้.	ขั้นสูง	ไม่ได้กำหนดไว้.					
ขั้นต่ำ	ไม่ได้กำหนดไว้.								
ขั้นสูง	ไม่ได้กำหนดไว้.								
· ความดันไอ	ไม่สามารถใช้ได้								
<ul style="list-style-type: none"> · ความหนาแน่น · ความหนาแน่นสัมพัทธ์ · ความหนาแน่นของไอ 	<ul style="list-style-type: none"> ไม่ได้กำหนด ไม่ได้กำหนดไว้. ไม่สามารถใช้ได้ 								

(ต่อหน้า 5)

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แผนข้อมูลความปลอดภัย

มาตามจีเอส

วันที่พิมพ์ 2021.12.30

การปรับปรุงใหม่ : 2021.12.30

ชื่อทางการค้า Lead Citrate, Trihydrate

(ต่อหน้า 4)

· อัตราการระเหย	ไม่สามารถใช้ได้
· ความสามารถในการละลายใน / ความสามารถผสมเป็นสารละลายเนื้อเดียวทุกส่วนผสมกับน้ำน่าน้ำ	ไม่ได้กำหนดไว้.
· สัมประสิทธิ์การแยกตัวอินทรีย์จากน้ำ	ไม่ได้กำหนดไว้.
· ความหนืด (ไดนามิก) พลศาสตร์ (คิเนเมติก) จลนศาสตร์	ไม่สามารถใช้ได้ ไม่สามารถใช้ได้
· 9.2 ข้อมูลอื่นๆ	ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

10 ความเสถียรและการเกิดปฏิกิริยา

- 10.1 ปฏิกิริยาโต้ตอบ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 10.2 เสถียรภาพทางเคมี
- การสลายตัวด้วยความร้อน / เงื่อนไขที่ต้องหลีกเลี่ยง ไม่มีการสลายตัวถ้าใช้ตามรายละเอียดที่ระบุไว้
- 10.3 ความเป็นไปได้ของการเกิดปฏิกิริยาอันตราย ไม่มีปฏิกิริยาเป็นอันตรายที่รู้จัก
- 10.4 เงื่อนไขเพื่อการหลีกเลี่ยง ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 10.5 วัสดุที่เข้ากันไม่ได้: ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 10.6 อันตรายจากการสลายตัวของผลิตภัณฑ์: ไม่มีสารจากการสลายตัวที่เป็นอันตรายที่รู้จัก

11 ข้อมูลด้านพิษวิทยา

- 11.1 ข้อมูลเกี่ยวกับผลกระทบทางพิษวิทยา
- ความเป็นพิษอย่างสาหัส:
อันตรายหากมีการกลืนกิน หรือ หากมีการสูดดม.
- อาการระคายเคืองเบื้องต้น
- บุนดิวหนิง Berdasarkan data yang ada, kriteria klasifikasi tidak dipenuhi.
- ที่ดวงตา Berdasarkan data yang ada, kriteria klasifikasi tidak dipenuhi.
- การทำให้แพ้ Berdasarkan data yang ada, kriteria klasifikasi tidak dipenuhi.
- ข้อมูลรายละเอียดเสริมเกี่ยวกับพิษวิทยา
- ผลกระทบ CMR (การทำให้เกิดมะเร็งการผ่าเหล่าและพิษต่อการสืบพันธุ์)
- การผ่าเหล่าในเซลล์สืบพันธุ์ Berdasarkan data yang ada, kriteria klasifikasi tidak dipenuhi.
- การกระตุ้นให้เกิดมะเร็ง Berdasarkan data yang ada, kriteria klasifikasi tidak dipenuhi.
- พิษต่อระบบสืบพันธุ์
May damage the unborn child. Suspected of damaging fertility.
- ความเป็นพิษต่ออวัยวะเป้าหมายเฉพาะ – การสัมผัสในครรภ์
Berdasarkan data yang ada, kriteria klasifikasi tidak dipenuhi.
- ความเป็นพิษต่ออวัยวะเป้าหมายเฉพาะ – การสัมผัสซ้ำ
อาจเป็นสาเหตุทำให้อวัยวะเสียหายจากการสัมผัสเป็นเวลานานหรือซ้ำๆ
- อันตรายต่อระบบหายใจ Berdasarkan data yang ada, kriteria klasifikasi tidak dipenuhi.

12 ข้อมูลด้านนิเวศวิทยา

- 12.1 ความเป็นพิษ
- ความเป็นพิษที่เกี่ยวข้องกับน้ำ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 12.2 การคงอยู่และการย่อยสลาย ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 12.3 การสะสมทางชีวภาพที่อาจเกิดขึ้น ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 12.4 การเปลี่ยนแปลงในดิน ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

(ต่อหน้า 6)

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แผนข้อมูลความปลอดภัย

มาตรฐาน GHS

วันที่พิมพ์ 2021.12.30

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ชื่อทางการค้า Lead Citrate, Trihydrate



(ต่อที่หน้า 5)

- ผลกระทบด้านพิษต่อระบบนิเวศน์
- ข้อสังเกต เป็นพิษมากสำหรับปลา
- ข้อมูลรายละเอียดเสริมเกี่ยวกับนิเวศวิทยา
- หมายเหตุทั่วไป
เป็นอันตรายต่อน้ำชั้น 3 (กฎข้อบังคับของเยอรมัน)(การประเมินค่าด้วยตัวเอง):เป็นอันตรายสูงสุดกับน้ำ
อย่าปล่อยให้ผลิตภัณฑ์ไปถึงน้ำผิวดินเส้นทางน้ำหรือระบบระบายน้ำเสียแม้ว่าจะเป็นปริมาณเล็กน้อยเท่านั้น
เป็นอันตรายต่อน้ำดื่มแม้จะร่วงลงในพื้นที่เป็นปริมาณที่น้อยมากก็ตาม
เป็นพิษกับปลาและแพลงก์ตอนในผิวน้ำ
มีพิษมากต่อสิ่งมีชีวิตในน้ำ
- 12.5 ผลของ PBT และการประเมิน vPvB
- PBT: ไม่สามารถใช้ได้
- vPvB: ไม่สามารถใช้ได้
- 12.6 ผลข้างเคียงอื่นๆ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

13 ข้อพิจารณาในการกำจัด

- 13.1 วิธีการกำจัดของเสีย
- คำแนะนำ ต้องไม่ทิ้งไปพร้อมกับขยะจากบ้านเรือนอย่าปล่อยให้ผลิตภัณฑ์เข้าถึงระบบระบายน้ำเสีย
- ภาชนะบรรจุที่ยังไม่ได้ล้างทำความสะอาด
- คำแนะนำ การกำจัดจะต้องทำตามกฎระเบียบที่เป็นทางการ

14 ข้อมูลการขนส่ง

- 14.1 เลขที่ UN
- ADR, IMDG, IATA UN2291
- 14.2 ชื่อการจัดส่งสินค้าที่เหมาะสมของ UN
- ADR 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS
- IMDG LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT
- IATA LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate)
- 14.3 ชั้นเรียนอันตรายจากการขนส่ง
- ADR, IMDG
- 
- ประเภท 6.1 สารมีพิษ
- ฉลากสิ่งที่เป็นอันตราย 6.1
- IATA
- 
- Class 6.1 สารมีพิษ
- Label 6.1

(ต่อที่หน้า 7)

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แผนข้อมูลความปลอดภัย

มาตรฐาน GHS

วันที่พิมพ์ 2021.12.30

การปรับปรุงใหม่ : 2021.12.30

ชื่อทางการค้า Lead Citrate, Trihydrate

(ต่อหน้า 6)

<ul style="list-style-type: none"> 14.4 กลุ่มของภาชนะบรรจุ ADR, IMDG, IATA 	III
<ul style="list-style-type: none"> 14.5 สิ่งที่เป็นอันตรายต่อสภาพแวดล้อม สารที่เป็นพิษต่อทะเล เฉพาะการติดฉลาก (ADR): 	วัสดุเป็นอันตรายต่อสภาพแวดล้อม; Marine Pollutant สัญลักษณ์ (ปลาและต้นไม้) สัญลักษณ์ (ปลาและต้นไม้)
<ul style="list-style-type: none"> 14.6 การป้องกันพิเศษล่วงหน้าสำหรับผู้ใช้ รหัสความอันตราย: หมายเลข EMS Segregation groups Stowage Category 	ค่าเตือน !: สารมีพิษ 60 6.1-04 Heavy metals and their salts (including their organometallic compounds), lead and its compounds A
<ul style="list-style-type: none"> 14.7 การขนส่งขนาดใหญ่ตามภาคผนวกของของ MARPOL73/78 และรหัส IBC 	ไม่สามารถใช้ได้
<ul style="list-style-type: none"> การขนส่ง/ข้อมูลรายละเอียดเสริม 	
<ul style="list-style-type: none"> ADR ปริมาณที่จำกัด (LQ) Excepted quantities (EQ) หมวดหมู่การขนส่ง รหัสควบคุมการผ่านอุโมงค์ 	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g 2 E
<ul style="list-style-type: none"> IMDG Limited quantities (LQ) Excepted quantities (EQ) 	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
<ul style="list-style-type: none"> “กฎระเบียบต้นแบบ” ของข้อ 3 	UN 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (LEAD CITRATE, TRIHYDRATE), 6.1, III, ENVIRONMENTALLY HAZARDOUS

15 ข้อมูลด้านกฎข้อบังคับ

- 15.1 ความปลอดภัย สุขภาพและระเบียบ/กฎหมายสิ่งแวดล้อมโดยเฉพาะของสารหรือสารผสม
ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- บัญชีรายชื่อวัตถุอันตราย
- กรมวิชาการเกษตร สารที่ไม่ได้อยู่ในรายการ
- กรมประมง สารที่ไม่ได้อยู่ในรายการ
- กรมปศุสัตว์ สารที่ไม่ได้อยู่ในรายการ
- อาหารและยา สารที่ไม่ได้อยู่ในรายการ
- กรมโรงงานอุตสาหกรรม สารที่ไม่ได้อยู่ในรายการ
- กรมธุรกิจพลังงาน สารที่ไม่ได้อยู่ในรายการ
- ทำเนียบสารเคมีที่มีอยู่แล้วในประเทศไทย (กรมโรงงานอุตสาหกรรม) สารที่ไม่ได้อยู่ในรายการ
- 15.2 การประเมินความปลอดภัยของสารเคมี: ไม่ได้ดำเนินการตามการประเมินความปลอดภัยของสารเคมี

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(ต่อหน้า 8)

แผ่นข้อมูลความปลอดภัย

มาตาม GHS

วันที่พิมพ์ 2021.12.30

การปรับปรุงใหม่ : 2021.12.30

ชื่อทางการค้า Lead Citrate, Trihydrate

(ต่อหน้า 7)

16 ข้อมูลอื่นๆ

ข้อมูลรายละเอียดนี้ใช้ความรู้ปัจจุบันของเราเป็นหลักอย่างไรก็ตามข้อมูลนี้ไม่ใช่การรับประกันจากสถาบันต่อคุณสมบัติเฉพาะของผลิตภัณฑ์และไม่สามารถยืนยันการบังคับใช้ตามกฎหมายที่เกี่ยวข้องกับสัญญา

· คำย่อและชื่อย่อที่พบบ่อย

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Repr. 1A: Reproductive toxicity – Category 1A

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

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Güvenlik bilgi formu
23 Haziran 2017 tarihli, 30105 sayılı, „Kimyasalların Kaydı, Değerlendirilmesi, İzni Ve Kisitlanması Hakkında Yönetmelik, Madde 27“ hükümlerine uygun düzenlenmiştir

Baskı tarihi: 30.12.2021

Form No.: 17800

Yeniden düzenleme tarihi: 30.12.2021

Bölüm 1: Maddenin/karışımın ve şirketin/dağıtıcının tanımı

- **1.1 Madde/Karışım kimliği**
- **Ticari adı:** Lead Citrate, Trihydrate
- **Mal numarası:** 17800, 17810
- **CAS - numarası:** 512-26-5
- **EC Numarası:** 208-141-1
- **AT - numarası:** 082-001-00-6
- **1.2 Maddenin veya karışımın ilgili tanımlanmış kullanımları ve tavsiye edilmeyen kullanımları**
Daha başka önemli bilgi mevcut değildir.
- **Maddenin Kullanımı / Hazırlanması** Laboratuarda kullanılan kimyasal maddeler
- **1.3 Güvenlik bilgi formu sağlayıcısının detayları**
- **Üretici / Teslimatı yapan:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Güvenlik hakkında bilgiler veren kesim:** Product safety department
- **1.4 Acil telefon numarası**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

Bölüm 2: Zararların tanımı

- **2.1 Madde veya karışımın sınıflandırılması**
- **Düzenlemeye göre sınıflandırma (EC) No 1272/2008**



GHS08 Sağlık zararlılığı

Repr. 1A H360Df Doğmamış çocukta hasara yol açabilir. Üremeye zarar verme şüphesi var.
 STOT RE 2 H373 Uzun süreli veya tekrarlı maruz kalma sonucu organlarda hasara yol açabilir.



GHS09 Çevre

Aquatic Acute 1 H400 Sucul ortamda çok toksiktir.
 Aquatic Chronic 1 H410 Sucul ortamda uzun süre kalıcı, çok toksik etki.



GHS07

Acute Tox. 4 H302 Yutulması halinde zararlıdır.
 Acute Tox. 4 H332 Solunması halinde zararlıdır.

(Devamı sayfa 2 'da)

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(Sayfa 1 'nin devamı)

- **2.2 Etiket bilgileri**
- **Yönetmelik (EC) No 1272/2008'e göre etiketleme**
Madde SEA yönetmeliğine göre sınıflandırılmış ve etiketlenmiştir.
- **Zararlılık İşaretleri**



GHS07 GHS08 GHS09

- **Uyarı Kelimesi Tehlike**
- **Zararlılık İfadesi**
H302+H332 Yutulduğunda veya solunduğunda zararlıdır.
H360Df Doğmamış çocukta hasara yol açabilir. Üremeye zarar verme şüphesi var.
H373 Uzun süreli veya tekrarlı maruz kalma sonucu organlarda hasara yol açabilir.
H410 Sucul ortamda uzun süre kalıcı, çok toksik etki.
- **Önlem İfadesi**
P260 Tozunu/dumanını/gazını/sisini/buharını/spreyini solumayın.
P280 Koruyucu eldiven/koruyucu kıyafet/göz koruyucu/yüz koruyucu kullanın.
P301+P312 YUTULDUĞUNDA: Kendinizi iyi hissetmiyorsanız ULUSAL ZEHİR DANIŞMA MERKEZİNİN 114 NOLU TELEFONUNU/doktoru arayın.
P304+P340 SOLUNDUĞUNDA: Zarar gören kişiyi temiz havaya çıkartın ve kolay biçimde nefes alması için rahat bir pozisyonda tutun.
P405 Kilit altında saklayın.
P501 İçeriği/kabı yerel/bölgesel/ulusal/uluslararası mevzuata uygun şekilde bertaraf edin.
- **Ek bilgiler:**
Kurşun içerir. Çocuklar tarafından çiğnenebilecek veya emilebilecek yüzeyler üzerinde kullanılmamalıdır.
- **2.3 Diğer zararlar**
- **PBT ve vPvB değerlendirmesi sonuçları**
- **PBT:** Uygulanamaz.
- **vPvB:** Uygulanamaz.

Bölüm 3: Bileşimi/İçindekiler hakkında bilgi

- **3.1 Maddeler**
- **CAS-No. tanımı**
512-26-5 Lead Citrate, Trihydrate
- **Teşhis numarası**
- **EC Numarası:** 208-141-1
- **AT - numarası:** 082-001-00-6

Bölüm 4: İlk yardım önlemleri

- **4.1 İlk yardım önlemlerinin tanıtımı**
- **Genel uyarılar:**
Zehirlenme belirtileri birçok saat sonra baş gösterebilir. Bu nedenle doktor kontrolü bir kazadan en az 48 saat sonrasına kadar sürdürülmelidir.
- **Teneffüs ettikten sonra:**
Temiz hava alması sağlanmalı, gerekirse nefes yardımı yapılmalı, sıcak tutulmalı. Şikâyetlerin devamı halinde doktora başvurulmalıdır.

(Devamı sayfa 3 'da)

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(Sayfa 2 'nin devamı)

- Baygınlık halinde yatırılması ve taşınması sabit yan pozisyonda olmalıdır.
- **Cilde temas ettikten sonra:** Ürün, genelde cildi tahriş etmez.
- **Gözlere temas ettikten sonra:**
Gözleri, gözkapakları açık bir şekilde birkaç dakika süreyle akan suyun altına tutunuz.
- **Yuttuktan sonra:** Derhal doktora gidiniz.
- **4.2 Akut ve sonradan görülen en önemli belirtiler ve etkiler** Daha başka önemli bilgi mevcut değildir.
- **4.3 Acil tıbbi müdahale ve özel tedavi gereği için işaretler** Daha başka önemli bilgi mevcut değildir.

Bölüm 5: Yangınla mücadele önlemleri

- **5.1 Yangın söndürücüler**
- **Elverişli söndürücü maddeler:** Yangın söndürme önlemlerini çevreye uydurunuz.
- **5.2 Madde veya karışımdan kaynaklanan özel zararlar** Daha başka önemli bilgi mevcut değildir.
- **5.3 Yangın söndürme ekipleri için tavsiyeler**
- **Özel koruyucu teçhizat:** Nefes koruyucu alet takınız.

Bölüm 6: Kaza sonucu yayılma önlemleri

- **6.1 Kişisel önlemler, koruyucu ekipman ve acil müdahale planı** Gerekli değildir.
- **6.2 Çevresel önlemler**
Sulara ya da kanalizasyona karışması halinde yetkili resmi makamlara haber veriniz.
Kanalizasyona/Yüzeysel suya/Yeraltı suyuna karışmasını önleyiniz.
- **6.3 Kontrol altında tutma ve temizleme için yöntem ve malzemeler**
Zararlı madde karışmış malzemeyi çöp olarak madde 13 'e göre tasfiye ediniz.
Yeterli havalandırma sağlayınız.
- **6.4 Diğer bölümlere atıflar**
Güvenli kullanım ile ilgili bilgileri 7. bölümden alınız.
Kişisel koruyucu teçhizat ile ilgili bilgileri 8. bölümden alınız.
Tasfiye ile ilgili bilgileri 13. bölümden alınız.

Bölüm 7: Elleçleme ve depolama

- **7.1 Güvenli elleçleme için önlemler**
Tozdan arınma iyi yapılmalıdır.
Çalışılan yerin iyi havalanmasını / havanın iyi emilmesini sağlayınız.
Kaplari açarken, taşırken ya da yere bırakırken dikkatli davranınız.
- **Yangın ve patlamadan korunmak için uyarılar:** Nefes koruyucu aletleri hazır bulundurunuz.
- **7.2 Birlikte bulunmaması gereken maddeleri de içeren güvenli depolama koşulları**
- **Depolama:**
- **Depolarda ve kaplarda aranan özellikler:** Belirli şartlar aranmaz.
- **Birarada depolama ile ilgili uyarılar:** Gerekli değil.
- **Depolama şartları ile ilgili diğer bilgiler:** Kabı sızdırmayacak şekilde kapalı tutunuz.
- **7.3 Belirli son kullanımlar** Daha başka önemli bilgi mevcut değildir.

Bölüm 8: Maruz kalma kontrolü/kişisel korunma

- **8.1 Kontrol parametreleri**
- **Teknik tesisatların şekillendirilmesi ile ilgili ek bilgiler:** Başka bilgi yoktur, madde 7 'den bakınız.

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(Sayfa 3 'nin devamı)

- **Çalışma yeri ile ilgili, kontrol edilmesi gereken sınır değerleri olan bileşenler:** Kalkmıştır.
- **Ek uyarılar:** Düzenlendiği tarihte geçerli listeler esas alınmıştır.
- **8.2 Maruz kalma kontrolü**
- **Kişisel koruyucu teçhizat:**
- **Genel koruyucu ve sıhhi önlemler:**
Gıda maddelerinden, içeceklerden ve yem maddelerinden uzak tutunuz.
Kirlenmiş, sıvı bulaşmış giyim eşyalarını derhal çıkartınız.
Molalardan önce ve mesai sonunda ellerinizi yıkayınız.
Koruyucu giyimi ayrı yerde muhafaza ediniz.
- **Nefes koruyucu önlemler:**
Kısa süreli ya da düşük ölçüde olumsuz tesir altında kalındığında nefes filtre aleti, yoğun bir şekilde ya da uzun süre etkisi altında kalındığında çevredeki havadan bağımsız olan nefes koruyucu cihaz kullanınız.
- **Elleri koruyucu:**
Eldiven malzemesi ürün / malzeme / hazırlanan madde ile ilgili olarak geçirmez ve dayanıklı olmalıdır.
Testlerin yapılmamış olması nedeni ile ürün / hazırlanmış madde / kimyasal karışım için lâzım olan eldiven imalatında kullanılması gereken malzeme ile ilgili herhangi bir tavsiye yapılamamaktadır.
Eldiven imalatı için kullanılan malzemelerin seçiminde delinme sürelerinin, geçirgenlik oranlarının ve bozulmanın göz önüne alınması gereklidir.
- **Eldiven malzemesi**
Uygun eldivenin seçiminde yalnız imalat malzemesi değil, aynı zamanda diğer kalite özellikleri de dikkate alınmalıdır ve bunlar imalatçıdan imalatçıya değişiklik göstermektedir.
- **Eldiven malzemesine nüfuz etme süresi**
Kesin delinme (aşınma) süresi eldiven imalatçısından öğrenilmeli ve bu sürelere riayet edilmelidir.
- **Gözleri koruyucu:** Gerekli değildir.

Bölüm 9: Fiziksel ve kimyasal özellikler

- **9.1 Temel fiziksel ve kimyasal özellikler hakkında bilgi**
- **Genel bilgiler**
- **Görünüm**

· Biçim:	Katı
· Renk:	Belirli değil.
· Koku:	Karakteristik
· Koku eşiği	Belirli değil.
- **pH - değeri:** Uygulanamaz.
- **Durum değişikliği**

· Erime noktası/donma noktası	Belirlenmemiştir.
· İlk kaynama noktası ve kaynama aralığı	Belirlenmemiştir.
- **Parlama noktası** Uygulanamaz.
- **Alevlenirlik (katı, gaz)** Madde tutuşmaz niteliktedir.
- **Bozunma sıcaklığı** Belirli değil.
- **Kendiliğinden tutuşma sıcaklığı** Belirli değil.
- **Patlayıcı özellikler** Ürünün patlama tehlikesi yoktur.
- **Patlama sınırları:**

· Alt:	Belirli değil.
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(Sayfa 4 'nin devamı)

· Üst:	Belirli değil.
· Buhar basıncı:	Uygulanamaz.
· Yoğunluk:	Belirlenmemiştir.
· Bağıl yoğunluk	Belirli değil.
· Buhar yoğunluğu	Uygulanamaz.
· Buharlaştırma hızı	Uygulanamaz.
· Çözülme kabiliyeti / karışma kabiliyeti suyla:	Belirli değil.
· Dağılım katsayısı: n-oktanol/su	Belirli değil.
· Akışkanlık	
· Dinamik:	Uygulanamaz.
· Kinematik:	Uygulanamaz.
· 9.2 Diğer bilgiler	Daha başka önemli bilgi mevcut değildir.

Bölüm 10: Kararlılık ve tepkime

- **10.1 Tepkime** Daha başka önemli bilgi mevcut değildir.
- **10.2 Kimyasal kararlılık**
- **Termik ayrışma / kaçınılması gereken şartlar:** Usulüne uygun şekilde kullanıldığında ayrışma olmaz.
- **10.3 Zararlı reaksiyon olasılığı** Tehlikeli reaksiyonları duyulmamıştır.
- **10.4 Kaçınılması gereken durumlar** Daha başka önemli bilgi mevcut değildir.
- **10.5 Uyumsuz malzemeler** Daha başka önemli bilgi mevcut değildir.
- **10.6 Zararlı bozunma ürünleri** Ayrışmada oluşan tehlikeli ürünler duyulmamıştır.

Bölüm 11: Toksikolojik bilgiler

- **11.1 Toksikolojik etkiler hakkında bilgi**
- **Akut toksisite**
Yutulduğunda veya solunduğunda zararlıdır.
- **Asli tahriş edici etkisi:**
- **Cilt aşınması/tahrişi** Mevcut bilgilere göre, sınıflandırma kriterlerini karşılamamaktadır.
- **Ciddi göz hasarları/tahrişi** Mevcut bilgilere göre, sınıflandırma kriterlerini karşılamamaktadır.
- **Solunum yolları veya cilt hassaslaşması** Mevcut bilgilere göre, sınıflandırma kriterlerini karşılamamaktadır.
- **Aşağıdaki grupların potansiyel etkilerine dair bilgiler:**
- **CMR-etkileri (kanser üretici, irsiyet değiştirici ve üremeyi tehdit edici etki)**
- **Eşey hücre mutajenitesi** Mevcut bilgilere göre, sınıflandırma kriterlerini karşılamamaktadır.
- **Kanserojenite** Mevcut bilgilere göre, sınıflandırma kriterlerini karşılamamaktadır.
- **Üreme sistemi toksisitesi**
Doğmamış çocukta hasara yol açabilir. Üremeye zarar verme şüphesi var.
- **BHOT - tek maruz kalma** Mevcut bilgilere göre, sınıflandırma kriterlerini karşılamamaktadır.
- **BHOT - tekrarlı maruz kalma**
Uzun süreli veya tekrarlı maruz kalma sonucu organlarda hasara yol açabilir.
- **Aspirasyon zararı** Mevcut bilgilere göre, sınıflandırma kriterlerini karşılamamaktadır.

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(Sayfa 5 'nin devamı)

Bölüm 12: Ekolojik bilgiler

- **12.1 Toksikite**
- **Su toksisitesi:** Daha başka önemli bilgi mevcut değildir.
- **12.2 Kalıcılık ve bozunabilirlik** Daha başka önemli bilgi mevcut değildir.
- **12.3 Biyobirikim potansiyeli** Daha başka önemli bilgi mevcut değildir.
- **12.4 Toprakta hareketlilik** Daha başka önemli bilgi mevcut değildir.
- **Ökotoksik etkileri:**
- **Not:** Balıklar için çok zehirli
- **Diğer ekolojik uyarılar:**
- **Genel uyarılar:**
Suyu tehdit sınıfı 3 (:): suyu çok tehdit edicidir
Az miktarlarda olsa bile yeraltı suyuna, duran ve akan sulara ve kanalizasyona ulaşmasını önleyiniz.
En cüzi miktarların bile yeraltına akması halinde içme suyunu tehdit eder.
Duran ve akan sulara balıklar ve plankton için de zehirlidir.
Suda yaşayan organizmalar için çok zehirlidir
- **12.5 PBT ve vPvB değerlendirmesinin sonuçları**
- **PBT:** Uygulanamaz.
- **vPvB:** Uygulanamaz.
- **12.6 Diğer olumsuz etkiler** Daha başka önemli bilgi mevcut değildir.

Bölüm 13: Bertaraf etme bilgileri

- **13.1 Atık işleme yöntemleri**
- **Tavsiye:** Ev çöpüyle beraber tasfiye edilmesi yasaktır. Kanalizasyona ulaşmasını önleyiniz.
- **Temizlenmemiş ambalajlar:**
- **Tavsiye:** Tasfiyesi resmi makamların yönetmeliklerine göre yapılır.

Bölüm 14: Taşımacılık bilgisi

- | | |
|---|---|
| · 14.1 UN Numarası | UN2291 |
| · ADR, IMDG, IATA | |
| · 14.2 UN uygun taşımacılık ismi | 2291 KURŞUN BİLEŞİĞİ, KATI, B.B.B. (Lead Citrate, Trihydrate), ÇEVRE İÇİN TEHLİKELİ |
| · ADR | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT |
| · IMDG | |
| · IATA | LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate) |
| · 14.3 Taşımacılık zararları | |
| · ADR, IMDG | |
| · sınıfı | 6.1 Zehirli maddeler |



(Devamı sayfa 7 'da)

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(Sayfa 6'nın devamı)

· Tehlike pusulası	6.1
· IATA	
	
· Class	6.1 Zehirli maddeler
· Label	6.1
· 14.4 Ambalaj grubu	
· ADR, IMDG, IATA	III
· 14.5 Çevresel zararlar	Çevreye zararlı madde, katı; Marine Pollutant
· Marine pollutant:	Sembol (balık ve ağaç)
· Etiketleme özel (ADR):	Sembol (balık ve ağaç)
· 14.6 Kullanıcılar için özel önlemler	Uyarı: Zehirli maddeler
· Tehlike Tanım No. (Kemler (tehlike) sayısı):	60
· EMS - numarası:	6.1-04
· Segregation groups	Heavy metals and their salts (including their organometallic compounds), lead and its compounds
· Stowage Category	A
· 14.7 MARPOL 73/78 EK II ve IBC Koduna göre Toplu Taşımacılık	Uygulanamaz.
· Nakliyat/diğer bilgiler:	
· ADR	
· Sınırlı Miktarlar	5 kg
· İstisnai miktarlar (EQ)	Kod: E1 İç ambalaj başına maksimum net miktar: 30 g Dış ambalaj başına maksimum net miktar: 1000 g
· Taşıma kategorisi	2
· Tünel kısıtlama kodu	E
· IMDG	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN "Model Düzenleme":	UN 2291 KURŞUN BİLEŞİĞİ, KATI, B.B.B. (LEAD CITRATE, TRIHYDRATE), 6.1, III, ÇEVRE İÇİN TEHLİKELİ

Bölüm 15: Mevzuat bilgisi

- 15.1 Madde veya karışım için güvenlik, sağlık ve çevresel düzenlemeler/mevzuat
- 2012/18/EU sayılı Direktifi
- Adlandırılmış tehlikeli maddeler - EK-1 Madde içinde bulunmamaktadır
- Kategori „Seveso“ E1
- Tehlikeli maddelerin niteleyici miktarı (ton) - alt seviye 100 t

(Devamı sayfa 8'da)

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(Sayfa 7 'nin devamı)

- **Tehlikeli maddelerin niteleyici miktarı (ton) - üst seviye 200 t**
- **1907/2006/EC sayılı Yönetmelik EK-XVII Conditions of restriction: 30, 63, 72**
- **648/2004/EC sayılı Yönetmelik Annex I Part 1**
- **Elektrikli ve Elektronik Eşyalarda Bazı Zararlı Maddelerin Kullanımının Sınırlandırılmasına Dair Yönetmelik (2011/65/EU) - Ek-2**
- **Madde içinde bulunmamaktadır**
- **Yönetmelik (EC) No 273/2004 Madde içinde bulunmamaktadır**
- **Yönetmelik (EC) No 111/2005 Madde içinde bulunmamaktadır**
- **15.2 Kimyasal güvenlik değerlendirmesi: Bir Kimyasal güvenlik değerlendirmesi yapılmamıştır.**

Bölüm 16: Diğer bilgiler

Veriler bugünkü bilgi durumumuza istinat etmektedir, ancak ürün özellikleri ile ilgili teminat teşkil etmezler ve akdî bir hukuki ilişki tesis etmezler.

· Kısaltmalar ve:

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Akut toksisite – Kategori 4

Repr. 1A: Üreme sistemi toksisitesi – Kategori 1A

STOT RE 2: Belirli hedef organ toksisitesi (tekrarlı maruz kalma) – Kategori 2

Aquatic Acute 1: Sucul ortam için zararlı – kısa süreli (akut) sucul zararlılık - Kategori 1

Aquatic Chronic 1: Sucul ortam için zararlı – uzun süreli (kronik) sucul zararlılık - Kategori 1

Phiếu an toàn hóa chất

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Phần 1: Nhận dạng hóa chất và thông tin về nhà cung cấp

- **Phân loại sản phẩm**
- **Tên thương mại** Lead Citrate, Trihydrate
- **Mã giao dịch:** 17800, 17810
- **Mã CAS:** 512-26-5
- **Số EC:** 208-141-1
- **Mã hiển thị:** 082-001-00-6
- **Mục đích sử dụng và hạn chế khi sử dụng:** Không có thêm thông tin có liên quan.
- **Người dẫn sử dụng** Phòng thí nghiệm hóa chất
- **Thông tin chi tiết của các nhà cung cấp các bảng dữ liệu an toàn**
- **Nhà sản xuất / Nhà phân phối:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Các thông tin chi tiết có thể tìm thấy ở:** Product safety department
- **Số điện thoại liên hệ trong trường hợp khẩn cấp**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

Phần 2: Nhận dạng đặc tính nguy hiểm của hóa chất

- **Phân loại chất và hỗn hợp**



Nguy hại sức khỏe

Độc tính sinh sản – Cấp 1A

H360 Có thể có hại đến khả năng sinh sản hoặc đến trẻ chưa sinh

Độc tính đến cơ quan cụ thể sau phơi nhiễm lặp lại – Cấp 2

H373 Có thể có hại cho các cơ quan thông qua tiếp xúc kéo dài hoặc lặp đi lặp lại.



Cá và cây

Nguy hại cấp tính đối với môi trường thủy sinh – Cấp 1

H400 Rất độc đối với sinh vật thủy sinh

Nguy hại mãn tính đối với môi trường thủy sinh – Cấp 1

H410 Rất độc đối với sinh vật thủy sinh với ảnh hưởng kéo dài



Độc cấp tính – Miệng – Cấp 4

H302 Có hại nếu nuốt phải

Độc cấp tính – Hô hấp – Cấp 4

H332 Có hại nếu hít phải.

- **Các phần tử nhãn hiệu**
- **Các yếu tố trên nhãn GHS** Chất này được xếp loại và ghi nhãn theo quy định của GHS

(Xem tiếp ở trang 2)

Phiếu an toàn hóa chất

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Tên thương mại Lead Citrate, Trihydrate

(Xem tiếp ở trang 1)

Các hình biểu thị sự nguy hiểm



GHS07 GHS08 GHS09

Từ cảnh báo Nguy hiểm

Các hướng dẫn về các nguy hiểm

Có hại nếu nuốt hoặc hít phải.

Có thể có hại đến khả năng sinh sản hoặc đến trẻ chưa sinh

Có thể có hại cho các cơ quan thông qua tiếp xúc kéo dài hoặc lặp đi lặp lại.

Rất độc đối với sinh vật thủy sinh với ảnh hưởng kéo dài

Các hướng dẫn an toàn

Không hít thở bụi/khói/khí/sương/hơi/bụi nước.

Đeo găng tay bảo vệ/mặc quần áo bảo hộ/dụng cụ bảo vệ mắt/bảo vệ mặt.

Trường hợp nuốt phải: gọi trung tâm giải độc/bác sĩ nếu cảm thấy khó chịu

Nếu hít phải: di chuyển nạn nhân ra nơi không khí thoáng mát và giữ để họ thở một cách thoải mái

Nơi cất giữ được khóa lại

Vứt sản phẩm/vỏ hộp theo quy định của địa phương/khu vực/quốc gia/quốc tế.

Các dấu hiệu nguy hiểm khác:

Kết quả của đánh giá PBT và vPvB Results

• **PBT:** Không được áp dụng

• **vPvB:** Không được áp dụng

Phần 3: Thông tin về thành phần các chất

Đơn chất

Mô tả mã CAS

512-26-5 Lead Citrate, Trihydrate

Mã nhận biết

• **Số EC:** 208-141-1

• **Mã hiển thị :** 082-001-00-6

Phần 4: Biện pháp sơ cứu về y tế

Mô tả về các biện pháp sơ cứu

Hướng dẫn chung:

Triệu chứng nhiễm độc có thể xuất hiện sau một vài giờ, nên những quan sát ý tế cần phải được kéo dài ít nhất 48 giờ sau tai nạn.

Sau khi hít vào:

Cung cấp không khí trong lành. Hô hấp nhân tạo nếu được yêu cầu. Giữ người bệnh ấm. Supply fresh air.

Trong trường hợp người bệnh bất tỉnh giữ bệnh nhân ở vị trí nằm nghiêng và chuyển đi.

Sau khi tiếp xúc với da:

Nhìn chung sản phẩm không gây kích ứng da

Sau khi tiếp xúc với mắt:

Mở mắt và rửa dưới vòi nước trong vài phút

Sau khi nuốt phải:

Gọi cho bác sĩ ngay

Thông tin dành cho bác sĩ:

Những triệu chứng và tác dụng cấp và chậm quan trọng nhất:

Không có thông tin liên quan nào khác

(Xem tiếp ở trang 3)

Phiếu an toàn hóa chất

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- **Các chỉ dẫn về sự giúp đỡ tức thời của bác sĩ và trợ giúp đặc biệt**
Không có thêm thông tin liên quan

(Xem tiếp ở trang 2)

Phần 5: Biện pháp xử lý khi có hỏa hoạn

- **Các phương tiện chữa cháy**
- **Các giải pháp chữa cháy thích hợp**
Use Sử dụng phương pháp chữa cháy phù hợp với điều kiện môi trường xung quanh
- **Những nguy cơ gây cháy từ các chất hoặc hỗn hợp** Không có thêm thông tin liên quan
- **Hướng dẫn trong trường hợp chữa cháy**
- **Các thiết bị bảo vệ** Mặt nạ phòng độc

Phần 6: Biện pháp phòng ngừa, ứng phó khi có sự cố

- **Trang thiết bị bảo hộ và quy trình ứng phó sự cố** Không yêu cầu
- **Các cảnh báo về môi trường**
Thông báo ngay cho nhà chức trách trong trường hợp ngấm vào hệ thống nước thải hay bất kỳ nguồn nước nào
Ngăn không cho tràn vào hệ thống nước thải, nước mặt hay nước ngầm
- **Biện pháp, vật liệu vệ sinh sau khi xảy ra sự cố**
Loại bỏ vật liệu bị ô nhiễm theo quy định về chất thải tại mục 13
Đảm bảo thoáng khí
- **Liên hệ đến các phần khác**
Xem phần 7 để biết thông tin về xử lý an toàn
Xem phần 8 để biết thông tin về thiết bị bảo hộ cá nhân
Xem phần 13 để biết thông tin về xả thải

Phần 7: Yêu cầu về sử dụng, bảo quản

- **Xử lý**
- **Các biện pháp bảo vệ để xử lý an toàn**
Loại bỏ hoàn toàn bụi
Đảm bảo nơi làm việc thoáng khí
Mở và vận chuyển các bình chứa cẩn thận
- **Thông tin về các biện pháp chống cháy**, Luôn có sẵn thiết bị hỗ trợ hô hấp
- **Điều kiện cho việc lưu trữ an toàn, bao gồm cả sự không tương thích**
- **Lưu trữ:**
- **Yêu cầu đối với phòng chứa và dụng cụ chứa** Không có yêu cầu đặc biệt nào
- **Thông tin về lưu trữ đối với một cơ sở lưu trữ thông thường** Không yêu cầu
- **Thông tin thêm về điều kiện lưu trữ** Đậy kín bình chứa
- **Tác dụng của sản phẩm** Không có thêm thông tin liên quan

Phần 8: Kiểm soát phơi nhiễm/yêu cầu về thiết bị bảo vệ cá nhân

- **Thông tin thêm về thiết kế các phương tiện kỹ thuật** Không có thêm dữ liệu; xem mục 7
- **Các thông số kiểm soát**
- **Các thành phần với giá trị giới hạn cần được yêu cầu giám sát tại nơi làm việc** Không yêu cầu
- **Thông tin bổ sung** Danh sách có hiệu lực trong suốt quá trình thực hiện được sử dụng làm cơ sở
(Xem tiếp ở trang 4)

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(Xem tiếp ở trang 3)

- **Kiểm soát các tình huống nguy hiểm**
- **Các thiết bị an toàn cá nhân**
- **Các biện pháp bảo vệ và vệ sinh tổng thể**
Tránh xa thực phẩm, đồ uống và đồ ăn cho vật nuôi
Loại bỏ ngay lập tức tất cả quần áo bị nhiễm bẩn
rửa tay trước giờ nghỉ và cuối giờ làm
Đề riêng quần áo bảo hộ
- **Bảo vệ đường hô hấp:**
Trong trường hợp tiếp xúc ít hoặc ô nhiễm ở mức độ thấp hãy sử dụng mặt nạ phòng độc. Trong trường hợp tiếp xúc nhiều và trong thời gian lâu thì phải sử dụng bình thở ôxi
- **Bảo vệ tay**
Chất liệu làm găng phải chống thấm dòi với sản phẩm/chất/chế phẩm
Do không thấy các cuộc thử nghiệm nên không có khuyến cáo về chất liệu làm găng tay cho sản phẩm/ chế phẩm/hỗn hợp hóa chất
Chọn chất liệu găng theo số lần và thời gian sử dụng
- **Chất liệu của găng tay**
Việc lựa chọn găng tay phù hợp không chỉ phụ thuộc vào chất liệu, mà còn về nhãn hiệu hơn và chất lượng và rất đa dạng về nhà sản xuất
- **Thời gian xâm nhập của găng tay vật liệu**
Việc phá vỡ chính xác qua thời gian đã được phát hiện bởi các nhà sản xuất găng tay bảo vệ và phải được giám sát
- **Bảo vệ mắt Eye** Không yêu cầu

Phần 9: Đặc tính lý, hóa của hóa chất

- **Thông tin về tính chất vật lý và hóa học cơ bản**
- **Thông tin tổng quát**
- **Diện mạo:**
 - Hình thức:: Chất rắn
 - Màu sắc: Không xác định.
- **Mùi:** Đặc điểm
- **Ngưỡng mùi:** Không xác định.
- **Độ pH** Không thể áp dụng.
- **Thay đổi trong điều kiện**
 - Điểm tan / Phạm vi tan: Không xác định
 - Điểm sôi / Phạm vi sôi: Không xác định.
- **Điểm cháy** Không thể áp dụng.
- **Tính dễ cháy (rắn, khí):** Sản phẩm không cháy.
- **Nhiệt độ phân hủy:** Không xác định.
- **Nhiệt độ tự cháy** Không xác định.
- **Nguy hiểm do cháy nổ:** Sản phẩm không có nguy cơ cháy nổ
- **Giới hạn nổ:**
 - Dưới: Không xác định
 - Trên: Không xác định.
- **Áp suất hóa hơi** Không thể áp dụng.
- **Mật độ:** Không xác định.
- **Mật độ tương đối:** Không xác định.

(Xem tiếp ở trang 5)

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(Xem tiếp ở trang 4)

· Mật độ của hơi:	Không thể áp dụng.
· Tỷ lệ hóa hơi	Không thể áp dụng.
· Độ hòa tan trong / Độ hòa trộn với: Nước	Không xác định.
· Sự phân biệt hệ số (n-octanol / Nước)	Không xác định.
· Độ nhớt: Động	Không thể áp dụng.
Tĩnh	Không thể áp dụng.
· Thông tin khác:	Không có thông tin chi tiết tương ứng

Phần 10: Mức ổn định và phản ứng của hóa chất

- **Khả năng phản ứng** Không có thêm thông tin liên quan
- **Tính ổn định**
- **Phân hủy nhiệt / Điều kiện cần tránh::** Không phân hủy nếu được sử dụng theo tiêu chuẩn.
- **Khả năng phản ứng nguy hiểm:** Chưa có phản ứng nguy hiểm nào được biết tới.
- **Các điều kiện cần tránh:** Không có thêm thông tin liên quan
- **Vật liệu không tương thích** Không có thêm thông tin liên quan.
- **Sản phẩm phân hủy nguy hiểm:** Chưa có sản phẩm phân hủy nào được biết đến.

Phần 11: Thông tin về độc tính

- **Thông tin về các hiệu ứng độc tính:**
- **Ngộ độc cấp tính:**
- **Hiệu ứng kích thích sơ cấp:**
- **Trên da** Không có tác dụng kích ứng.
- **Trên mắt:** Không có tác dụng kích ứng.
- **Độ nhạy cảm** Không có tác dụng mẫn cảm nào được biết tới.
- **Thông tin thêm về độc tính::**
- **Hiệu ứng CMR (Gây ung thư, gây biến dị, sinh sản độc tính)**
Độc tính sinh sản – Cấp 1A

Phần 12: Thông tin về sinh thái

- **Độc tính**
- **Thủy sản độc tính:** Không có thêm thông tin liên quan.
- **Sự kiên trì và khả năng nhạc dần:** Không có thêm thông tin liên quan.
- **Hành vi trong các hệ thống môi trường:**
- **Khả năng tích lũy sinh học** Không có thêm thông tin liên quan.
- **Độ linh động trong đất** Không có thêm thông tin liên quan.
- **Ảnh hưởng của sinh thái độc**
- **Ghi chú:** Rất độc hại cho cá.
- **Bổ sung thông tin sinh thái:**
- **Ghi chú tổng quát:**
Độc hại cho nước loại 3 (quy định của Đức) (Tự đánh giá): rất độc hại cho nước.
Không để sản phẩm tiếp xúc với nước ngầm, nguồn nước hoặc hệ thống nước thải, kể cả với số lượng nhỏ.
Độc hại với nước uống kể cả với số lượng cực kỳ nhỏ thấm vào đất. .

(Xem tiếp ở trang 6)

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(Xem tiếp ở trang 5)

Cũng độc hại cho cá và sinh vật phù du sống trong môi trường nước.



Rất độc cho các sinh vật sống dưới nước.

- **Kết quả của đánh giá PBT và vPvB**
- **PBT PBT:** Không có khả năng ứng dụng.
- **vPvB vPvB:** Không có khả năng ứng dụng.
- **Các hiệu ứng bất lợi** Không có thêm thông tin liên quan.

Phần 13: Thông tin về thải bỏ

- **Phương pháp xử lý chất thải**
- **Khuyến nghị**
Không được xử lý cùng rác thải sinh hoạt. Không được bỏ sản phẩm vào hệ thống nước thải.
- **Bao bì bán**
- **Khuyến nghị:** Việc xử lý phải thực hiện theo các quy định của chính quyền.

Phần 14: Thông tin khi vận chuyển

<ul style="list-style-type: none"> • Mã LHQ (UN) • ADR, IMDG, IATA 	UN2291
<ul style="list-style-type: none"> • Tên vận chuyển theo quy ước của LHQ • ADR • IMDG • IATA 	2291 LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), MARINE POLLUTANT LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate)
<ul style="list-style-type: none"> • vận chuyển các lớp học nguy hiểm • ADR, IMDG 	
	
<ul style="list-style-type: none"> • lớp • nhãn 	6.1 Các chất độc. 6.1
<ul style="list-style-type: none"> • IATA 	
	
<ul style="list-style-type: none"> • Class • Label 	6.1 Các chất độc. 6.1
<ul style="list-style-type: none"> • Nhóm bao bì • ADR, IMDG, IATA 	III
<ul style="list-style-type: none"> • Các môi trường nguy hiểm: • Ô nhiễm biển: 	Chất độc hại với môi trường, dạng rắn; Ô nhiễm biển Biểu tượng (cá và cây)

(Xem tiếp ở trang 7)

Phiếu an toàn hóa chất
theo điều Luật hóa chất số: 06/2007/QH12, Điều 29

Ngày in 2021.12.30

Sửa lại: 2021.12.30

Tên thương mại Lead Citrate, Trihydrate

(Xem tiếp ở trang 6)

· Đánh dấu đặc biệt (ADR):	Biểu tượng (cá và cây)
· Các biện pháp phòng ngừa đặc biệt cho người sử dụng:	Cảnh báo: Các chất độc.
· Mã nguy hiểm:	60
· Mã EMS:	6.1-04
· Các nhóm phân tách	Heavy metals and their salts (including their organometallic compounds), lead and its compounds
· Stowage Category	A
· Vận chuyển với số lượng lớn theo Phụ Lục II của MARPOL73/78 và mã IBC	Không có khả năng ứng dụng.
· Vận chuyển/ Thông tin thêm:	
· ADR	
· Số lượng giới hạn (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· Danh mục vận chuyển	2
· Mã hạn chế đường hầm	E
· IMDG	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· Mẫu chuẩn của LHQ:	UN 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (LEAD CITRATE, TRIHYDRATE), 6.1, III, ENVIRONMENTALLY HAZARDOUS

Phần 15: Thông tin về pháp luật

- **An toàn, sức khỏe và các quy định, pháp luật về môi trường cho các chất và hỗn hợp**
Không có thêm thông tin liên quan
- **Kho hóa chất và chất hóa học của Philippin** Chất không được liệt kê.
- **Lập kế hoạch cho thuốc và chất độc theo mẫu chuẩn** Chất không được liệt kê.
- **Danh mục hóa chất sản xuất, kinh doanh có điều kiện trong lĩnh vực công nghiệp - phụ lục I**
Chất không được liệt kê.
- **Danh mục hóa chất hạn chế sản xuất, kinh doanh trong lĩnh vực công nghiệp - phụ lục II**
Chất không được liệt kê.
- **Danh mục hóa chất nguy hiểm phải xây dựng kế hoạch phòng ngừa, ứng phó sự cố hóa chất - phụ lục IV - Ngưỡng khối lượng hóa chất tồn trữ lớn nhất tại một thời điểm (kg)**
Chất không được liệt kê.
- **Danh mục hóa chất phải khai báo - phụ lục V** Chất không được liệt kê.
- **Các yếu tố trên nhãn GHS** Chất này được xếp loại và ghi nhãn theo quy định của GHS

(Xem tiếp ở trang 8)

Phiếu an toàn hóa chất
theo điều Luật hóa chất số: 06/2007/QH12, Điều 29

Ngày in 2021.12.30

Sửa lại: 2021.12.30

Tên thương mại Lead Citrate, Trihydrate

(Xem tiếp ở trang 7)

· **Các hình biểu thị sự nguy hiểm**



GHS07 GHS08 GHS09

· **Từ cảnh báo** Nguy hiểm

· **Các hướng dẫn về các nguy hiểm**

Có hại nếu nuốt hoặc hít phải.

Có thể có hại đến khả năng sinh sản hoặc đến trẻ chưa sinh

Có thể có hại cho các cơ quan thông qua tiếp xúc kéo dài hoặc lặp đi lặp lại.

Rất độc đối với sinh vật thủy sinh với ảnh hưởng kéo dài

· **Các hướng dẫn an toàn**

Không hít thở bụi/khói/khí/sương/hơi/bụi nước.

Đeo găng tay bảo vệ/mặc quần áo bảo hộ/dụng cụ bảo vệ mắt/bảo vệ mặt.

Trường hợp nuốt phải: gọi trung tâm giải độc/bác sĩ nếu cảm thấy khó chịu

Nếu hít phải: di chuyển nạn nhân ra nơi không khí thoáng mát và giữ để họ thở một cách thoải mái

Nơi cất giữ được khóa lại

Vứt sản phẩm/vỏ hộp theo quy định của địa phương/khu vực/quốc gia/quốc tế.

· **Đánh giá an toàn hóa chất:** Đánh giá an toàn hóa chất chưa được tiến hành.

Phần 16: Các thông tin cần thiết khác

Thông tin này dựa trên kiến thức hiện nay của chúng tôi. Tuy nhiên, điều này không đảm bảo cho bất cứ tính chất cụ thể nào của sản phẩm và không thiết lập mối quan hệ hợp tác có giá trị pháp lý nào.

· **Liên hệ:**

· **Ngày tháng biên soạn phiếu:** 2021.12.30

· **Ngày tháng sửa đổi, bổ sung gần nhất:** 2021.12.30

· **Chữ viết tắt hoặc Viết tắt chữ cái đầu:**

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

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Độc cấp tính – Miệng – Cấp 4: Acute toxicity – Category 4

Độc tính sinh sản – Cấp 1A: Reproductive toxicity – Category 1A

Độc tính đến cơ quan cụ thể sau phơi nhiễm lặp lại – Cấp 2: Specific target organ toxicity (repeated exposure) – Category 2

Nguy hại cấp tính đối với môi trường thủy sinh – Cấp 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Nguy hại mãn tính đối với môi trường thủy sinh – Cấp 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1