

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/15/2015

Reviewed on 05/15/2015

## 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: sgkcck@aol.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.

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



Toxic

Repr. Cat. 1, 3

May cause harm to the unborn child.



Harmful

Possible risk of impaired fertility. Harmful by inhalation and if swallowed.



Dangerous for the environment

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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**Trade name:** Lead Citrate, Trihydrate

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*Danger of cumulative effects.*

· **Information concerning particular hazards for human and environment:** *Not applicable.*

· **Label elements**

· **Labelling according to EU guidelines:**

*The product has been classified and marked in accordance with directives on hazardous materials.*

· **Code letter and hazard designation of product:**



Repr. Cat. 1, 3

Toxic

Dangerous for the environment

· **Risk phrases:**

*May cause harm to the unborn child.*

*Possible risk of impaired fertility.*

*Also harmful by inhalation and if swallowed.*

*Danger of cumulative effects.*

*Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*

· **Safety phrases:**

*Avoid exposure - obtain special instructions before use.*

*In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).*

*This material and its container must be disposed of as hazardous waste.*

*Avoid release to the environment. Refer to special instructions/safety data sheets.*

· **Special labeling of certain preparations:**

*Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.*

· **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*

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**Trade name: Lead Citrate, Trihydrate**

· **Index number:** 082-001-00-6

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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:** Immediately call a 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:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **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

- **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.

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**Trade name: Lead Citrate, Trihydrate**

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- **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.
- **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:**

<b>Form:</b>	Solid
<b>Color:</b>	Not determined.
<b>Odor:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.
- **pH-value:** Not applicable.
- **Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
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Trade name: Lead Citrate, Trihydrate

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<b>Boiling point/Boiling range:</b>	Undetermined.
· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gaseous):</b>	Product is not flammable.
· <b>Ignition temperature:</b>	
<b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Not determined.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapor pressure:</b>	Not applicable.
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not applicable.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with Water:</b>	Not determined.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity**
- **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.

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· **NTP (National Toxicology Program)**

512-26-5 Lead Citrate, Trihydrate

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.
- **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

- |                                  |  |
|----------------------------------|--|
| · <b>UN-Number</b>               |  |
| · <b>DOT, ADR, IMDG, IATA</b>    | UN2291   |
| · <b>UN proper shipping name</b> |  |
| · <b>DOT</b>                     | Lead compounds, soluble, n.o.s.  |
| · <b>ADR</b>                     | 2291 Lead compounds, soluble, n.o.s. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS |
| · <b>IMDG</b>                    | LEAD COMPOUND, SOLUBLE, N.O.S., MARINE POLLUTANT   |
| · <b>IATA</b>                    | LEAD COMPOUND, SOLUBLE, N.O.S.   |

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· **Transport hazard class(es)**· **DOT**

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

· **ADR, IMDG**

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

· **IATA**

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

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

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

· **Special precautions for user** Warning: Toxic substances  
 · **Danger code (Kemler):** 60  
 · **EMS Number:** F-A,S-A  
 · **Segregation groups** Heavy metals and their salts (including their organometallic compounds), lead and its compounds

· **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

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<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	<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"> <li>· <b>UN "Model Regulation":</b></li> </ul>	<p>UN2291, Lead compounds, soluble, n.o.s. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS, 6.1, III</p>

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**
- **Section 355 (extremely hazardous substances):** Substance is not listed.
- **Section 313 (Specific toxic chemical listings):** Substance is listed.
- **TSCA (Toxic Substances Control Act):** 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 established by ACGIH)** Substance is not listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.
- **Product related hazard informations:**  
The product has been classified and marked in accordance with directives on hazardous materials.
- **Hazard symbols:**

Repr. Cat. 1, 3  
Toxic  
Dangerous for the environment
- **Risk phrases:**  
May cause harm to the unborn child.  
Possible risk of impaired fertility.  
Also harmful by inhalation and if swallowed.  
Danger of cumulative effects.  
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Safety phrases:**  
Avoid exposure - obtain special instructions before use.  
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
This material and its container must be disposed of as hazardous waste.  
Avoid release to the environment. Refer to special instructions/safety data sheets.
- **Special labeling of certain preparations:**  
Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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**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.*

· **Date of preparation / last revision** 05/15/2015 / -

· **Abbreviations and acronyms:**

*ADR: Accord européen sur le transport 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*

*P: Marine Pollutant*

*ACGIH: American Conference of Governmental Industrial Hygienists*

*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)*

*Acute Tox. 4: Acute toxicity, Hazard Category 4*

*Carc. 1B: Carcinogenicity, Hazard Category 1B*

*Repr. 1A: Reproductive toxicity, Hazard Category 1A*

*STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2*

USA

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

Printing date 15.05.2015

Revision: 15.05.2015

## 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: sgkcck@aol.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)

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 Hazards identification

· **Classification of the substance or mixture**

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



Toxic

Repr. Cat. 1, 3

May cause harm to the unborn child.



Harmful

Possible risk of impaired fertility. Harmful by inhalation and if swallowed.



Dangerous for the environment

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Danger of cumulative effects.

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# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 15.05.2015

Revision: 15.05.2015

Trade name: Lead Citrate, Trihydrate

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· **Information concerning particular hazards for human and environment:** Not applicable.

· **Label elements**

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**



Repr. Cat. 1, 3  
Toxic  
Dangerous for the environment

· **Risk phrases:**

May cause harm to the unborn child.

Possible risk of impaired fertility.

Also harmful by inhalation and if swallowed.

Danger of cumulative effects.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Special labelling of certain preparations:**

Contains lead. Should not be used on surfaces liable to be chewed or sucked by children

· **Information concerning particular hazards for human and environment:**

· **Safety phrases:**

Avoid exposure - obtain special instructions before use.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

This material and its container must be disposed of as hazardous waste.

Avoid release to the environment. Refer to special instructions/safety data sheets.

· **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.

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## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.05.2015

Revision: 15.05.2015

**Trade name: Lead Citrate, Trihydrate**

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- **After swallowing:** Call for a doctor immediately.
- **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 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **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

- **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.

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

Printing date 15.05.2015

Revision: 15.05.2015

Trade name: Lead Citrate, Trihydrate

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- **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

- |  |   |
|--|---|
| · <b>Information on basic physical and chemical properties</b> |   |
| · <b>General Information</b>                                   |   |
| · <b>Appearance:</b>   |   |
| Form:  | Solid   |
| Colour:  | Not determined.                               |
| · <b>Odour:</b>  | Characteristic                                |
| · <b>Odour threshold:</b>                                      | Not determined.                               |
| · <b>pH-value:</b>   | Not applicable.                               |
| · <b>Change in condition</b>                                   |   |
| Melting point/Melting range:                                   | Undetermined.                                 |
| Boiling point/Boiling range:                                   | Undetermined.                                 |
| · <b>Flash point:</b>  | Not applicable.                               |
| · <b>Flammability (solid, gaseous):</b>                        | Product is not flammable.                     |
| · <b>Ignition temperature:</b>                                 |   |
| Decomposition temperature:                                     | Not determined.                               |
| · <b>Self-igniting:</b>  | Not determined.                               |
| · <b>Danger of explosion:</b>                                  | Product does not present an explosion hazard. |
| · <b>Explosion limits:</b>                                     |   |
| Lower:   | Not determined.                               |
| Upper:   | Not determined.                               |
| · <b>Vapour pressure:</b>                                      | Not applicable.                               |

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AU

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

Printing date 15.05.2015

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Trade name: Lead Citrate, Trihydrate

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· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not applicable.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with water:</b>	Not determined.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

- **Reactivity**
- **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.
- **Sensitisation:** No sensitising effects known.
- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**  
Repr. Cat. 1, 3

### 12 Ecological information

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

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**Safety data sheet**  
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**Trade name: Lead Citrate, Trihydrate**




(Contd. of page 5)

- *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**

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

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**Trade name: Lead Citrate, Trihydrate**

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· <b>EMS Number:</b>	F-A,S-A
· <b>Segregation groups</b>	Heavy metals and their salts (including their organometallic compounds), lead and its compounds
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADG</b>	
· <b>Limited quantities (LQ)</b>	5 kg
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· <b>Transport category</b>	2
· <b>Tunnel restriction code</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5 kg
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Australian Inventory of Chemical Substances** Substance is listed.
- **Standard for the Uniform Scheduling of Medicines and Poisons** Substance is not listed.
- **Labelling according to EU guidelines:**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**

		Repr. Cat. 1, 3 Toxic Dangerous for the environment
---	---	---
- **Risk phrases:**  
May cause harm to the unborn child.  
Possible risk of impaired fertility.  
Also harmful by inhalation and if swallowed.  
Danger of cumulative effects.  
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Safety phrases:**  
Avoid exposure - obtain special instructions before use.  
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
This material and its container must be disposed of as hazardous waste.  
Avoid release to the environment. Refer to special instructions/safety data sheets.
- **Special labelling of certain preparations:**  
Contains lead. Should not be used on surfaces liable to be chewed or sucked by children

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-AU-



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**Trade name: Lead Citrate, Trihydrate**

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

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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.*

AU

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/15/2015

Reviewed on 05/15/2015

## 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: sgkcck@aol.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.

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



Toxic

Repr. Cat. 1, 3

May cause harm to the unborn child.



Harmful

Possible risk of impaired fertility. Harmful by inhalation and if swallowed.



Dangerous for the environment

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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# Safety Data Sheet

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**Trade name: Lead Citrate, Trihydrate**

(Contd. of page 1)

*Danger of cumulative effects.*

· **Information concerning particular hazards for human and environment:** *Not applicable.*

· **Label elements**

· **Labelling according to EU guidelines:**

*The product has been classified and marked in accordance with directives on hazardous materials.*

· **Code letter and hazard designation of product:**



Repr. Cat. 1, 3

Toxic

Dangerous for the environment

· **Risk phrases:**

*May cause harm to the unborn child.*

*Possible risk of impaired fertility.*

*Also harmful by inhalation and if swallowed.*

*Danger of cumulative effects.*

*Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*

· **Safety phrases:**

*Avoid exposure - obtain special instructions before use.*

*In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).*

*This material and its container must be disposed of as hazardous waste.*

*Avoid release to the environment. Refer to special instructions/safety data sheets.*

· **Special labeling of certain preparations:**

*Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.*

· **Hazard description:**

· **WHMIS-symbols:**

*D1B - Toxic material causing immediate and serious toxic effects*

*D2A - Very toxic material causing other toxic effects*



· **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.*

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(Contd. on page 3)

# Safety Data Sheet

## acc. to OSHA HCS

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Trade name: *Lead Citrate, Trihydrate*

(Contd. of page 2)

### 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.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Immediately call a 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:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **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.

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Trade name: Lead Citrate, Trihydrate

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## 7 Handling and storage

- **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.
- **Control parameters**

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

**512-26-5 Lead Citrate, Trihydrate**

EV	Long-term value: 0.05 mg/m <sup>3</sup> 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.

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Trade name: Lead Citrate, Trihydrate

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## 9 Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form:	Solid
Color:	Not determined.
Odor:	Characteristic
Odour threshold:	Not 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.

- **Ignition temperature:**

Decomposition temperature: Not determined.

- **Auto igniting:** Not determined.

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

- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

- **Vapor pressure:** Not applicable.

- **Density:** Not determined.

- **Relative density** Not determined.

- **Vapour density** Not applicable.

- **Evaporation rate** Not applicable.

- **Solubility in / Miscibility with**

Water: 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**

- **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.

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Trade name: Lead Citrate, Trihydrate

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· **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)**

512-26-5 Lead Citrate, Trihydrate

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.· **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.

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Trade name: Lead Citrate, Trihydrate

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## 14 Transport information

<ul style="list-style-type: none"> <li>· UN-Number</li> <li>· DOT, TDG, IMDG, IATA</li> </ul>	UN2291
<ul style="list-style-type: none"> <li>· UN proper shipping name</li> <li>· DOT</li> <li>· TDG</li> <li>· IMDG</li> <li>· IATA</li> </ul>	<p>Lead compounds, soluble, n.o.s.            2291 Lead compounds, soluble, n.o.s. (Lead Citrate, Trihydrate),            ENVIRONMENTALLY HAZARDOUS            LEAD COMPOUND, SOLUBLE, N.O.S., MARINE POLLUTANT            LEAD COMPOUND, SOLUBLE, N.O.S.</p>
<ul style="list-style-type: none"> <li>· Transport hazard class(es)</li> <li>· DOT</li> </ul>	<div style="display: flex; align-items: center; gap: 10px;">   </div> <p>6.1 Toxic substances</p>
<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> <li>· TDG, IMDG</li> </ul>	<p>6.1 6.1</p>
<div style="display: flex; align-items: center; gap: 10px;">   </div> <ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	<p>6.1 Toxic substances 6.1</p>
<ul style="list-style-type: none"> <li>· IATA</li> </ul>	<div style="display: flex; align-items: center; gap: 10px;">  </div> <ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>
<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	<p>6.1 Toxic substances 6.1</p>
<ul style="list-style-type: none"> <li>· Packing group</li> <li>· DOT, TDG, IMDG, IATA</li> </ul>	<p>III</p>
<ul style="list-style-type: none"> <li>· Environmental hazards:</li> <li>· Marine pollutant:</li> <li>· Special marking (TDG):</li> </ul>	<p>Environmentally hazardous substance, solid; Marine Pollutant            Yes (P)            Symbol (fish and tree)            Symbol (fish and tree)</p>
<ul style="list-style-type: none"> <li>· Special precautions for user</li> <li>· Danger code (Kemler):</li> <li>· EMS Number:</li> <li>· Segregation groups</li> </ul>	<p>Warning: Toxic substances            60            F-A,S-A            Heavy metals and their salts (including their organometallic compounds), lead and its compounds</p>
<ul style="list-style-type: none"> <li>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</li> </ul>	<p>Not applicable.</p>

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Trade name: Lead Citrate, Trihydrate

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· **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).

· **TDG**

· **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 "Model Regulation":**

UN2291, Lead compounds, soluble, n.o.s. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS, 6.1, III

## 15 Regulatory information

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

· **Sara**

· **Section 355 (extremely hazardous substances):** Substance is not listed.

· **Section 313 (Specific toxic chemical listings):** Substance is listed.

· **TSCA (Toxic Substances Control Act):** 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 established by ACGIH)** Substance is not listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)** Substance is listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)** Substance is not listed.

· **Canadian Ingredient Disclosure list (limit 1%)** Substance is not listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**



Repr. Cat. 1, 3

Toxic

Dangerous for the environment

· **Risk phrases:**

May cause harm to the unborn child.

Possible risk of impaired fertility.

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**Trade name: Lead Citrate, Trihydrate**

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Also harmful by inhalation and if swallowed.

Danger of cumulative effects.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Safety phrases:**

Avoid exposure - obtain special instructions before use.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

This material and its container must be disposed of as hazardous waste.

Avoid release to the environment. Refer to special instructions/safety data sheets.

· **Special labeling of certain preparations:**

Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.

· **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.

· **Date of preparation / last revision** 05/15/2015 / -

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

P: Marine Pollutant

ACGIH: American Conference of Governmental Industrial Hygienists

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)

WHMIS: Workplace Hazardous Materials Information System (Canada)

Acute Tox. 4: Acute toxicity, Hazard Category 4

Carc. 1B: Carcinogenicity, Hazard Category 1B

Repr. 1A: Reproductive toxicity, Hazard Category 1A

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

CA

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

Printing date 15.05.2015

Revision: 15.05.2015

### 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: sgkcck@aol.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**



GHS08 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.



GHS09 environment

Aquatic Acute 1    H400    Very toxic to aquatic life.

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



GHS07

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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# Safety data sheet

according to 1907/2006/EC, Article 31

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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.**P281 Use personal protective equipment as required.**P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.**P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **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**

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 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.

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- **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  
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:**

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

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Product is not flammable.
- **Ignition temperature:**
- **Decomposition temperature:** Not determined.
- **Self-igniting:** Not determined.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
- **Vapour pressure:** Not applicable.

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· <b>Density:</b>	<i>Not determined.</i>
· <b>Relative density</b>	<i>Not determined.</i>
· <b>Vapour density</b>	<i>Not applicable.</i>
· <b>Evaporation rate</b>	<i>Not applicable.</i>
· <b>Solubility in / Miscibility with water:</b>	<i>Not determined.</i>
· <b>Partition coefficient (n-octanol/water):</b>	<i>Not determined.</i>
· <b>Viscosity:</b>	
<b>Dynamic:</b>	<i>Not applicable.</i>
<b>Kinematic:</b>	<i>Not applicable.</i>
· <b>9.2 Other information</b>	<i>No further relevant information available.</i>

### SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **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:**
- **Primary irritant effect:**
- **on the skin:** *No irritant effect.*
- **on the eye:** *No irritating effect.*
- **Sensitisation:** *No sensitising effects known.*
- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**  
*Repr. 1A*

### 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.*  
*Danger to drinking water if even extremely small quantities leak into the ground.*  
*Also poisonous for fish and plankton in water bodies.*

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- 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

- |  |   |
|--|---|
| · <b>14.1 UN-Number</b>                    |   |
| · <b>ADR, IMDG, IATA</b>                   | UN2291  |
| · <b>14.2 UN proper shipping name</b>      |   |
| · <b>ADR</b>                               | 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS |
| · <b>IMDG</b>                              | LEAD COMPOUND, SOLUBLE, N.O.S., MARINE POLLUTANT  |
| · <b>IATA</b>                              | LEAD COMPOUND, SOLUBLE, N.O.S.  |
| · <b>14.3 Transport hazard class(es)</b>   |   |
| · <b>ADR, IMDG</b>                         |   |
|  |        |
| · <b>Class</b>                             | 6.1 Toxic substances.   |
| · <b>Label</b>                             | 6.1   |
| · <b>IATA</b>                              |   |
|  |        |
| · <b>Class</b>                             | 6.1 Toxic substances.   |
| · <b>Label</b>                             | 6.1   |
| · <b>14.4 Packing group</b>                |   |
| · <b>ADR, IMDG, IATA</b>                   | III   |
| · <b>14.5 Environmental hazards:</b>       | Environmentally hazardous substance, solid; Marine Pollutant                              |
| · <b>Marine pollutant:</b>                 | Yes (P)<br>Symbol (fish and tree)   |
| · <b>Special marking (ADR):</b>            | Symbol (fish and tree)  |
| · <b>14.6 Special precautions for user</b> | Warning: Toxic substances.  |

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· <b>Danger code (Kemler):</b>	60
· <b>EMS Number:</b>	F-A,S-A
· <b>Segregation groups</b>	Heavy metals and their salts (including their organometallic compounds), lead and its compounds
· <b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b>	
· <b>Limited quantities (LQ)</b>	5 kg
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· <b>Transport category</b>	2
· <b>Tunnel restriction code</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5 kg
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· <b>UN "Model Regulation":</b>	UN2291, LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS, 6.1, III

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **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 européen sur le transport 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  
P: Marine Pollutant  
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)  
Acute Tox. 4: Acute toxicity, Hazard Category 4  
Repr. 1A: Reproductive toxicity, Hazard Category 1A  
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2  
Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

# 化学品安全技术说明书

根据 GB/T 16483-2008, GB/T 17519-2013

打印日期 2015.05.15

在 2015.05.15 审核

## 1 化学品及企业标识

- 产品识别者
- 化学品中文(英文)名称, 化学品俗名或商品名: Lead Citrate, Trihydrate
- 商品编号: 17800, 17810
- CAS 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。
- 原材料的应用/准备工作进行 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: sgkcck@aol.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

### · GHS危险性类别



健康危险

生殖毒性 第1A类 H360 可能损害生育力或胎儿  
 特定靶器官系统毒性 ( 重复接触 ) 第2类 H373 长期或反复接触



环境

对水环境的危害(急性) 第1类 H400 对水生生物毒性非常大  
 对水环境的危害(慢性) 第1类 H410 对水生生物毒性非常大并且有长期持续影响



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

### · 标签因素

- 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。

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## · 图示



GHS07 GHS08 GHS09

## · 名称 危险

## · 危险字句

吞咽或吸入有害。  
可能损害生育力或胎儿  
长期或反复接触  
对水生生物毒性非常大并且有长期持续影响

## · 警戒字句

## · 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。

## · 事故响应

如误吞咽：如感觉不适，呼叫解毒中心/医生  
如误吸入：将受害人转移到空气新鲜处，保持呼吸舒适的休息姿势。

## · 安全贮存

存放处须加锁。

## · 废弃处置

按照本地 / 地区 / 国家 / 国际规例处理内含物 / 容器。

## · 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.

· 最重要的急慢性症状及其影响 无相关详细资料。

· 需要及时的医疗处理及特别处理的症状 无相关详细资料。

CN

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## 5 消防措施

- **灭火方法**
- **灭火的方法和灭火剂:** 二氧化碳 (CO<sub>2</sub>)、灭火粉末或洒水. 使用洒水或抗酒精泡沫灭火剂扑灭较大的火种.
- **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

- **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.  
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.

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· **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:**

· **形状:** 固体

· **颜色:** 未决定.

· **气味:** 有特性的

· **嗅觉阈限** 未决定.

· **pH值:** 不适用的

· **条件的更改**

· **熔点:** 未确定的

· **沸点/初沸点和沸程:** 未确定的

· **闪点:** 不适用的

· **可燃性(固体、气体):** 该产品是不可燃的

· **点火温度:**

· **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:** 未决定.

· **较高:** 未决定.

· **蒸气压:** 不适用的

· **密度:** 未决定的

· **相对密度** 未决定.

· **蒸气密度** 不适用的

· **蒸发速率** 不适用的

· **溶解性**

· **水:** 未决定.

· **n-辛醇/水分配系数:** 未决定.

· **黏性:**

· **动态:** 不适用的

· **运动学的:** 不适用的

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· 其他信息 无相关详细资料。

### 10 稳定性和反应性

- 反应性
- 稳定性
- 热分解/要避免的情况: 如果遵照规格使用则不会分解。
- 有害反应可能性 未有已知的危险反应。
- 应避免的条件 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:
- 主要的刺激性影响:
- 皮肤: 没有刺激性影响。
- 在眼睛上面: 没有刺激的影响。
- 致敏作用: 没有已知的敏化影响。
- 对以下组别可能产生影响的数据:
- CMR作用 (致癌、导致基因突变、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 无相关详细资料。
- 潜在的生物累积性 无相关详细资料。
- 土壤内移动性 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:
- 总括注解:  
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  
即使是小量, 不要让该产品接触地下水、水道或污水系统。  
即使是极其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
- 其他副作用 无相关详细资料。

### 13 废弃处置

- 废弃处置方法
- 建议: 不能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。

(在 6 页继续)

# 化学品安全技术说明书

根据 GB/T 16483-2008, GB/T 17519-2013

打印日期 2015.05.15

在 2015.05.15 审核

化学品中文(英文)名称, 化学品俗名或商品名 : Lead Citrate, Trihydrate

(在 5 页继续)

- 受污染的容器和包装:
- 建议: 必须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

· UN适当装船名

· ADR

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

· IMDG

LEAD COMPOUND, SOLUBLE, N.O.S., MARINE POLLUTANT

· IATA

LEAD COMPOUND, SOLUBLE, N.O.S.

· 运输危险等级

· ADR, IMDG



· 级别

6.1 有毒物质

· 标签

6.1

· IATA



· Class

6.1 有毒物质

· Label

6.1

· 包装组别

· ADR, IMDG, IATA

III

· 危害环境:

该原料对环境有害; Marine Pollutant

· 海运污染物质:

是 (P)

象征符号 (鱼和树)

· 特别标记 (ADR):

象征符号 (鱼和树)

· 用户特别预防措施

警告: 有毒物质

· 危险编码:

60

· EMS 号码:

F-A,S-A

· Segregation groups

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

· MARPOL73/78(针对船舶引起的海洋污染预防协议)  
附件书2及根据IBC Code(国际装船货物编码)的大量  
运送

不适用的

(在 7 页继续)

# 化学品安全技术说明书

根据 GB/T 16483-2008, GB/T 17519-2013

打印日期 2015.05.15

在 2015.05.15 审核

化学品中文(英文)名称, 化学品俗名或商品名 : Lead Citrate, Trihydrate

(在 6 页继续)

## · 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":

UN2291, LEAD COMPOUND, SOLUBLE, N.O.S.  
(Lead Citrate, Trihydrate), ENVIRONMENTALLY  
HAZARDOUS, 6.1, III

## 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
- 新化学物质环境管理办法
- 中国现有化学物质名录 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。
- 危险象形图表



GHS07 GHS08 GHS09

- 名称 危险
- 危险字句
  - 吞咽或吸入有害。
  - 可能损害生育力或胎儿
  - 长期或反复接触
  - 对水生生物毒性非常大并且有长期持续影响
- 警戒字句
- 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。
- 事故响应
  - 如误吞咽：如感觉不适，呼叫解毒中心/医生
  - 如误吸入：将受害人转移到空气新鲜处，保持呼吸舒适的休息姿势。
- 安全贮存
  - 存放处须加锁。
- 废弃处置
  - 按照本地 / 地区 / 国家 / 国际规例处理内含物 / 容器。
- 化学物质安全性评价: 尚未进行化学物质安全性评价

CN

(在 8 页继续)



# 化学品安全技术说明书

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打印日期 2015.05.15

在 2015.05.15 审核

**化学品中文(英文)名称, 化学品俗名或商品名 : Lead Citrate, Trihydrate**

(在 7 页继续)

### 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。

**缩写:**

ADR: Accord européen sur le transport 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

P: Marine Pollutant

EINECS: European Inventory of Existing Commercial Chemical Substances

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

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

生殖毒性 第1A类: Reproductive toxicity, Hazard Category 1A

特定靶器官系统毒性 (重复接触) 第2类: Specific target organ toxicity - Repeated exposure, Hazard Category 2

对水环境的危害(急性) 第1类: Hazardous to the aquatic environment - Acute Hazard, Category 1

对水环境的危害(慢性) 第1类: Hazardous to the aquatic environment - Chronic Hazard, Category 1

-CN-

# Bezpečnostní list

## podle 1907/2006/ES, Článek 31

Datum vydání: 15.05.2015

Revize: 15.05.2015

### 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: sgkcck@aol.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: 15.05.2015

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Obchodní označení: Lead Citrate, Trihydrate

(pokračování strany 1)

### · Piktogramy označující nebezpečí



GHS07 GHS08 GHS09

### · Signální slovo Nebezpečí

### · Údaje 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.

### · Bezpečnostní pokyny

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

P281 Používejte požadované osobní ochranné prostředky.

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

P304+P340 PŘI VDECHNUTÍ: Přeneste postiženého na čerstvý vzduch a ponechte jej v klidu 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.

(pokračování na straně 3)

## Bezpečnostní list podle 1907/2006/ES, Článek 31

Datum vydání: 15.05.2015

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**Obchodní označení: Lead Citrate, Trihydrate**

(pokračování strany 2)

- **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:**  
CO<sub>2</sub>, hasící prášek nebo rozstříkované vodní paprsky. Větší ohně zdotat rozstříkovanými vodními paprsky nebo pěnou odolnou vůči alkoholu.
- **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

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

(pokračování na straně 4)

# Bezpečnostní list

## podle 1907/2006/ES, Článek 31

Datum vydání: 15.05.2015

Revize: 15.05.2015

Obchodní označení: Lead Citrate, Trihydrate

(pokračování strany 3)

### · 8.1 Kontrolní parametry

#### · Kontrolní parametry:

#### 512-26-5 Lead Citrate, Trihydrate

NPK	Krátkodobá hodnota: 0,2 mg/m <sup>3</sup> Dlouhodobá hodnota: 0,05 mg/m <sup>3</sup> P*, jako Pb
-----	--

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

### · 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 kritériích, 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 (vůně): Charakteristický

· Prahová hodnota zápachu: Není určeno.

· Hodnota pH: Nedá se použít.

#### · Změna stavu

Teplota (rozmezí teplot) tání: Není určeno.

Teplota (rozmezí teplot) varu: Není určeno.

· Bod vzplanutí: Nedá se použít.

· Zápalnost (tuhé, plynné skupenství): Látka se nedá zapálit.

#### · Zápalná teplota:

Teplota rozkladu: Není určeno.

· Samozápalnost: Není určeno.

· Nebezpečí exploze: U produktu nehrozí nebezpečí exploze.

(pokračování na straně 5)

# Bezpečnostní list

## podle 1907/2006/ES, Článek 31

Datum vydání: 15.05.2015

Revize: 15.05.2015

Obchodní označení: *Lead Citrate, Trihydrate*

(pokračování strany 4)

· <b>Meze výbušnosti:</b>	
<b>Dolní mez:</b>	Není určeno.
<b>Horní mez:</b>	Není určeno.
· <b>Tenze par:</b>	Nedá se použít.
· <b>Hustota:</b>	Není určena.
· <b>Relativní hustota</b>	Není určeno.
· <b>Hustota par</b>	Nedá se použít.
· <b>Rychlost odpařování</b>	Nedá se použít.
· <b>Rozpustnost ve / směsitelnost s vodě:</b>	Není určeno.
· <b>Rozdělovací koeficient n-oktanol/voda:</b>	Není určeno.
· <b>Viskozita:</b>	
<b>Dynamicky:</b>	Nedá se použít.
<b>Kinematicky:</b>	Nedá se použít.
· <b>9.2 Další informace</b>	Další relevantní informace nejsou k dispozici.

### ODDÍL 10: Stálost a reaktivita

- **10.1 Reaktivita**
- **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:**
- **Primární dráždivé účinky:**
- **na kůži:** Žádné dráždivé účinky
- **na zrak:** Žádné dráždivé účinky
- **Senzibilizace:** Není známo žádné senzibilizující působení.
- **Účinky CMR (karcinogenita, mutagenita a toxicita pro reprodukci)**  
Repr. 1A

### 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.
- **Ekotoxické účinky:**
- **Poznámka:** Velmi jedovatý pro ryby.

(pokračování na straně 6)

# Bezpečnostní list

## podle 1907/2006/ES, Článek 31

Datum vydání: 15.05.2015

Revize: 15.05.2015

**Obchodní označení: Lead Citrate, Trihydrate**




(pokračování strany 5)

- **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 zeminy.*  
*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"> <li>· <b>14.1 Číslo OSN</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | UN2291  |
| <ul style="list-style-type: none"> <li>· <b>14.2 Náležitý název OSN pro zásilku</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG</b></li> <li>· <b>IATA</b></li> </ul>  | 2291 SLOUČENINA OLOVA, ROZPUSTNÁ, J.N. (Lead Citrate, Trihydrate), OHROŽUJÍCÍ ŽIVOTNÍ PROSTŘEDÍ<br>LEAD COMPOUND, SOLUBLE, N.O.S., MARINE POLLUTANT<br>LEAD COMPOUND, SOLUBLE, N.O.S. |
| <ul style="list-style-type: none"> <li>· <b>14.3 Třída/třídy nebezpečnosti pro přepravu</b></li> <li>· <b>ADR, IMDG</b></li> </ul>  |   |
| <div style="display: flex; align-items: center; gap: 10px;">   </div> |   |
| <ul style="list-style-type: none"> <li>· <b>třída</b></li> <li>· <b>Etiketa</b></li> </ul>  | 6.1 Jedovaté látky<br>6.1   |
| <ul style="list-style-type: none"> <li>· <b>IATA</b></li> </ul>   |   |
| <div style="display: flex; align-items: center; gap: 10px;">  </div>   |   |
| <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>  | 6.1 Jedovaté látky<br>6.1   |
| <ul style="list-style-type: none"> <li>· <b>14.4 Obalová skupina</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | III   |

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## Bezpečnostní list podle 1907/2006/ES, Článek 31

Datum vydání: 15.05.2015

Revize: 15.05.2015

Obchodní označení: Lead Citrate, Trihydrate

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<ul style="list-style-type: none"> <li>· <b>14.5 Nebezpečnost pro životní prostředí:</b></li> <li>· <b>Látka znečišťující moře:</b></li> <li>· <b>Zvláštní označení (ADR):</b></li> </ul>	<p>Látka ohrožující životní prostředí; Marine Pollutant Ano (P) Symbol (ryba a strom) Symbol (ryba a strom)</p>
<ul style="list-style-type: none"> <li>· <b>14.6 Zvláštní bezpečnostní opatření pro uživatele</b></li> <li>· <b>Kemlerovo číslo:</b></li> <li>· <b>EMS-skupina:</b></li> <li>· <b>Segregation groups</b></li> </ul>	<p>Varování: Jedovaté látky 60 F-A,S-A Heavy metals and their salts (including their organometallic compounds), lead and its compounds</p>
<ul style="list-style-type: none"> <li>· <b>14.7 Hromadná přeprava podle přílohy II MARPOL73/78 a předpisu IBC</b></li> </ul>	<p>Nedá se použít.</p>
<p>· <b>Přeprava/další údaje:</b></p>	
<ul style="list-style-type: none"> <li>· <b>ADR</b></li> <li>· <b>Omezené množství (LQ)</b></li> <li>· <b>Vyňatá množství (EQ)</b></li> <li>· <b>Přepravní kategorie</b></li> <li>· <b>Kód omezení pro tunely:</b></li> </ul>	<p>5 kg Kód: E1 Nejvyšší čisté množství na vnitřní obal: 30 g Nejvyšší čisté množství na vnější obal: 1000 g 2 E</p>
<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	<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"> <li>· <b>UN "Model Regulation":</b></li> </ul>	<p>UN2291, SLOUČENINA OLOVA, ROZPUSTNÁ, J.N. (Lead Citrate, Trihydrate), OHROŽUJÍCÍ ŽIVOTNÍ PROSTŘEDÍ, 6.1, III</p>

### ODDÍL 15: Informace o předpisech

- **15.1 Nařízení týkající se bezpečnosti, zdraví a životního prostředí/specifické právní předpisy týkající se látky nebo směsi**  
Další relevantní informace nejsou k dispozici.
- **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 européen sur le transport 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  
P: Marine Pollutant  
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)  
Acute Tox. 4: Acute toxicity, Hazard Category 4  
Repr. 1A: Reproductive toxicity, Hazard Category 1A

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**Bezpečnostní list**  
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*STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2*  
*Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1*  
*Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1*

(pokračování strany 7)

CZ

# Sikkerhedsdatablad

ifølge 1907/2006/EF, Artikel 31

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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: sgkcck@aol.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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## · Farepiktogrammer



GHS07 GHS08 GHS09

## · Signalord Fare

### · Risikosætninger

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.

P281 Anvend de påkrævede personlige værnemidler.

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

P304+P340 VED INDÅNDING: Flyt personen til et sted med frisk luft og sørg for, at vedkommende hviler i en stilling, som letter vejrtrækningen.

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:**  
CO<sub>2</sub>, slukningspulver eller vandspraystråle. Større brande bekæmpes med vandspraystråle eller alkoholbestandigt skum.
- **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

- **Yderligere anvisninger vedrørende udformning af tekniske anlæg:** Ingen yderligere oplysninger, se punkt 7.
- **8.1 Kontrolparametre**
- **Indholdsstoffer med arbejdspladsrelaterede grænseværdier, der skal overvåges:** Ikke relevant.
- **Yderligere anvisninger:** Baseret på de lister, der var gældende på tidspunktet for udarbejdelsen.

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- **8.2 Eksponeringskontrol**
- **Personlige værnemidler:**
- **Generelle forholdsregler vedrørende beskyttelse og hygiejne:**  
Skal holdes borte fra føde- og drikkevarer og foderstoffer.  
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: Fysisk-kemiske egenskaber

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

#### · Generelle oplysninger

#### · Udseende:

· <b>Form:</b>	Fast
· <b>Farve:</b>	Ikke bestemt.
· <b>Lugt:</b>	Karakteristisk
· <b>Lugtærskel:</b>	Ikke bestemt.

· **pH-værdi:** Ikke relevant.

#### · Tilstandsændring

· <b>Smeltepunkt/smelteområde</b>	Ikke bestemt.
· <b>Kogepunkt/kogeområde</b>	Ikke bestemt.

· **Flammepunkt:** Ikke relevant.

· **Antændelighed (fast, i luftform):** Stoffet er ikke antændeligt.

#### · Antændelsepunkt:

· **Nedbrydningstemperatur:** Ikke bestemt.

· **Selvantændelighed:** Ikke bestemt.

· **Eksplodingsfare:** Produktet er ikke eksplosivt.

#### · Eksplosionsgrænser:

· <b>Nedre:</b>	Ikke bestemt.
· <b>Øvre:</b>	Ikke bestemt.

· **Damptryk:** Ikke relevant.

· **Densitet:** Ikke bestemt.

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· <b>Relativ densitet</b>	Ikke bestemt.
· <b>Dampæthed</b>	Ikke relevant.
· <b>Fordampningshastighed</b>	Ikke relevant.
· <b>Opløselighed i/blandbarhed med vand:</b>	Ikke bestemt.
· <b>Fordelingskoefficient (n-octanol/vand):</b>	Ikke bestemt.
· <b>Viskositet:</b>	
<b>dynamisk:</b>	Ikke relevant.
<b>kinematisk:</b>	Ikke relevant.
· <b>9.2 Andre oplysninger</b>	Der står ingen yderligere, relevante informationer til rådighed.

### PUNKT 10: Stabilitet og reaktivitet

- **10.1 Reaktivitet**
- **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:**
- **Primær irritationsvirkning:**
- **på huden:** Ingen lokalirriterende virkning.
- **på øjet:** Ingen lokalirriterende virkning.
- **Sensibilisering:** Der er ikke kendskab til nogen sensibiliserende virkning.
- **CMR-virkninger (kræftfremkaldende egenskaber, mutagenicitet og reproduktionstoksicitet)**  
Repr. 1A

### 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.
- **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

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- **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: Forhold vedrørende 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

- |   |   |
|---|---|
| · <b>14.1 UN-nummer</b>   |   |
| · <b>ADR, IMDG, IATA</b>  | UN2291  |
| · <b>14.2 UN-forsendelsesbetegnelse (UN proper shipping name)</b> |   |
| · <b>ADR</b>  | 2291 BLYFORBINDELSE, OPLØSELIG, N.O.S. (triblydicitrat), MILJØFARLIGT   |
| · <b>IMDG</b>   | LEAD COMPOUND, SOLUBLE, N.O.S., MARINE POLLUTANT  |
| · <b>IATA</b>   | LEAD COMPOUND, SOLUBLE, N.O.S.  |
| · <b>14.3 Transportfareklasse(r)</b>                              |   |
| · <b>ADR, IMDG</b>  |   |
|   |   |
| · <b>klasse</b>   | 6.1 Giftige stoffer   |
| · <b>Faremærkat</b>   | 6.1   |
| · <b>IATA</b>   |   |
|   |    |
| · <b>Class</b>  | 6.1 Giftige stoffer   |
| · <b>Label</b>  | 6.1   |
| · <b>14.4 Emballagegruppe</b>                                     |   |
| · <b>ADR, IMDG, IATA</b>  | III   |
| · <b>14.5 Miljøfarer:</b>   | Miljøfarligt fast stof; Marine Pollutant  |
| · <b>Marine pollutant:</b>  | Ja (P)  |
|   | Symbol (fisk og træ)  |
| · <b>Særlige mærkningsbe (ADR):</b>                               | Symbol (fisk og træ)  |
| · <b>14.6 Særlige forsigtighedsregler for brugeren</b>            | Advarsel: Giftige stoffer   |
| · <b>Kemler-tal:</b>  | 60  |

(Fortsættes på side 7)

# Sikkerhedsdatablad

ifølge 1907/2006/EF, Artikel 31

Trykdato: 15.05.2015

Revision: 15.05.2015

**Handelsnavn: triblydicitrat**

(Fortsat fra side 6)

· <b>EMS-nummer:</b>	F-A,S-A
· <b>Segregation groups</b>	Heavy metals and their salts (including their organometallic compounds), lead and its compounds
· <b>14.7 Bulktransport i henhold til bilag II i MARPOL 73/78 og IBC-koden</b>	Ikke relevant.
· <b>Transport/yderligere oplysninger:</b>	
· <b>ADR</b>	
· <b>Begrænsede mængder (LQ)</b>	5 kg
· <b>Undtagne mængder (EQ)</b>	Kode: E1 Største tilladte nettomængde pr. indvendig emballage: 30 g Største tilladte nettomængde pr. ydre emballage: 1000 g
· <b>Transportkategori</b>	2
· <b>Tunnelrestriktionskode</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5 kg
· <b>Excepted quantities (EQ)</b>	Kode: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· <b>UN "Model Regulation":</b>	UN2291, BLYFORBINDELSE, OPLØSELIG, N.O.S. (triblydicitrat), MILJØFARLIGT, 6.1, III

## PUNKT 15: Oplysninger om regulering

- **15.1 Særlige bestemmelser/særlig lovgivning for stoffet eller blandingen med hensyn til sikkerhed, sundhed og miljø**
- **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 européen sur le transport 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

P: Marine Pollutant

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

Acute Tox. 4: Acute toxicity, Hazard Category 4

Repr. 1A: Reproductive toxicity, Hazard Category 1A

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1



# Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 15.05.2015

Herziening van: 15.05.2015

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

### · 1.1 Productidentificatie

· Handelsnaam: trilooddicitraat

· 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: sgkcck@aol.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)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 15.05.2015

Herziening van: 15.05.2015

**Handelsnaam: trilooddicitraat**

(Vervolg van blz. 1)



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.
- **Voorzorgsmaatregelen**  
 P260      Stof/rook/gas/nevel/damp/spuitnevel niet inademen.  
 P281      De nodige persoonlijke beschermingsuitrusting gebruiken.  
 P301+P312 NA INSLIKKEN: bij onwel voelen een ANTIGIFCENTRUM/arts raadplegen.  
 P304+P340 NA INADEMING: het slachtoffer in de frisse lucht brengen en laten rusten in een houding die het ademen vergemakkelijkt.  
 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 trilooddicitraat
- **Identificatienummer(s)**
- **EC-nummer:** 208-141-1
- **Catalogusnummer:** 082-001-00-6

NL

(Vervolg op blz. 3)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 15.05.2015

Herziening van: 15.05.2015

Handelsnaam: trilooddictraat

(Vervolg van blz. 2)

### 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:**  
CO<sub>2</sub>, bluspoeder of waterstraal. Grotere brand met waterstraal bestrijden of met schuim, dat tegen alcohol bestand is.
- **5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt**  
Geen verdere relevante informatie verkrijgbaar.
- **5.3 Advies voor brandweertieners**
- **Speciale beschermende kleding:** Ademhalingstoestel aantrekken.

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

- **6.1 Persoonlijke voorzorgsmaatregelen, beschermde uitrusting 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 Insluifings- 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.

(Vervolg op blz. 4)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 15.05.2015

Herziening van: 15.05.2015

**Handelsnaam:** trilooddictraat

(Vervolg van blz. 3)

- **Informatie m.b.t. gezamenlijke opslag:** Niet noodzakelijk.
- **Verdere inlichtingen over eisen m.b.t. de opslag:** Tanks ondoordringbaar gesloten houden.
- **7.3 Specifiek eindgebruik** Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 8: Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

- **Aanvullende gegevens m.b.t. de inrichting van technische installaties:** Geen aanvullende gegevens. Zie 7.
- **8.1 Controleparameters**
- **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 ademhalingsstoestel 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 chemicaliënmengsel 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:**

<b>Vorm:</b>	Vast
<b>Kleur:</b>	Niet bepaald.
<b>Reuk:</b>	Karakteristiek
<b>Geurdrempelwaarde:</b>	Niet bepaald.
- **pH-waarde:** Niet bruikbaar.
- **Toestandsverandering**

<b>Smeltpunt/smeltbereik:</b>	Niet bepaald.
<b>Kookpunt/kookpuntbereik:</b>	Niet bepaald.
- **Vlampunt:** Niet bruikbaar.
- **Ontvlambaarheid (vast, gasvormig):** De stof is niet ontvlambaar.

(Vervolg op blz. 5)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 15.05.2015

Herziening van: 15.05.2015

**Handelsnaam:** trilooddictraat

(Vervolg van blz. 4)

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

### RUBRIEK 10: Stabiliteit en reactiviteit

- **10.1 Reactiviteit**
- **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:**
- **Primaire aandoening:**
- **op de huid:** Geen prikkelend effect.
- **aan het oog:** Geen prikkelend effect.
- **Overgevoeligheid:** Geen effect van overgevoeligheid bekend.
- **CMR-effecten (kankerverwekkendheid, mutageniteit en giftigheid voor de voortplanting)**  
Repr. 1A

### RUBRIEK 12: Ecologische informatie

- **12.1 Toxiciteit**
- **Aquatische toxiciteit:** Geen verdere relevante informatie verkrijgbaar.

(Vervolg op blz. 6)

# Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 15.05.2015

Herziening van: 15.05.2015

**Handelsnaam:** trilooddicitraat


(Vervolg van blz. 5)

- **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) 4: Zeer vergiftig voor in het water levende organismen; kan in het aquatisch milieu op lange termijn schadelijke effecten veroorzaken.  
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 terecht komen.
- **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. (trilooddicitraat), MILIEUGEVAARLIJK
- **IMDG** LEAD COMPOUND, SOLUBLE, N.O.S., MARINE POLLUTANT
- **IATA** LEAD COMPOUND, SOLUBLE, N.O.S.
- **14.3 Transportgevarenklasse(n)**
- **ADR, IMDG**
- 
- **klasse** 6.1 Giftige stoffen
- **Etiket** 6.1

(Vervolg op blz. 7)

# Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 15.05.2015

Herziening van: 15.05.2015

**Handelsnaam:** trilooddictraat

(Vervolg van blz. 6)

## · IATA



· Class 6.1 Giftige stoffen  
 · Label 6.1

· 14.4 Verpakkingsgroep:  
 · ADR, IMDG, IATA III

· 14.5 Milieugevaren:  
 · Marine pollutant: Milieugevaarlijke vaste stof; Marine Pollutant  
 Ja (P)  
 Symbool (vis en boom)  
 · Bijzondere kenmerking (ADR): Symbool (vis en boom)

· 14.6 Bijzondere voorzorgen voor de gebruiker Waarschuwing: Giftige stoffen  
 · Kemler-getal: 60  
 · EMS-nummer: F-A,S-A  
 · Segregation groups Heavy metals and their salts (including their organometallic compounds), lead and its compounds

· 14.7 Vervoer in bulk overeenkomstig bijlage II bij  
 MARPOL 73/78 en de IBC-code Niet bruikbaar.

## · Transport/verdere gegevens:

· ADR  
 · Beperkte hoeveelheden (LQ) 5 kg  
 · Uitgezonderde hoeveelheden (EQ) Code: E1  
 Grootste netto hoeveelheid per binnenverpakking: 30 g  
 Grootste netto hoeveelheid per buitenverpakking: 1000 g  
 · Vervoerscategorie 2  
 · Tunnelbeperkingscode 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

· VN "Model Regulation": UN2291, LOODVERBINDING, OPLOSBAAR, N.E.G.  
 (trilooddictraat), MILIEUGEVAARLIJK, 6.1, III

## 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

512-26-5	trilooddictraat	3
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· NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling

512-26-5	trilooddictraat	1
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- NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding De stof is niet aanwezig.

(Vervolg op blz. 8)

**Veiligheidsinformatieblad**  
volgens 1907/2006/EG, Artikel 31

datum van de druk: 15.05.2015

Herziening van: 15.05.2015

**Handelsnaam: trilooddicitraat**

(Vervolg van blz. 7)

- **Nationale voorschriften:**
- **Gevaarklasse v. water:** Waterbezwaarlijkheid (NL) 4: Saneringsinspanning A
- **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 européen sur le transport 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

P: Marine Pollutant

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)

Acute Tox. 4: Acute toxicity, Hazard Category 4

Repr. 1A: Reproductive toxicity, Hazard Category 1A

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

NL



# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 15.05.2015

Tarkistus: 15.05.2015

### 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: sgkcck@aol.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 vesieläölle.  
Aquatic Chronic 1 H410      Erittäin myrkyllistä vesieläölle, 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 15.05.2015

Tarkistus: 15.05.2015

**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.

P281       Käytä vaadittuja henkilönsuojaimia.

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

P304+P340 JOS KEMIKAALIA ON HENGITETTY: Siirrä henkilö raittiiseen ilmaan ja pidä lepoasennossa, jossa on helppo hengittää.

P405       Varastoi lukitussa tilassa.

P501       Säilytä 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.

· **Hengitettävä:**

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 15.05.2015

Tarkistus: 15.05.2015

**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:**  
CO<sub>2</sub>, kuivakemikaalisammutin tai vesisuihku. Suuremmat palot torjutaan vesisuihukilla tai alkoholeja kestäväällä vaahdolla.
- **5.2 Aineesta tai seoksesta johtuvat erityiset vaarat** Merkittäviä lisätietoja ei ole saatavilla.
- **5.3 Palontorjuntaa koskevat ohjeet**
- **Erikoinen suojavarustus:** Käytettävä hengityssuojainta.

### KOHTA 6: Toimenpiteet onnettomuuspäästöissä

- **6.1 Varotoimenpiteet, henkilönsuojaimet 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 tuuletuksesta.
- **6.4 Viittaukset muihin kohtiin**  
Turvallista käsittelyä koskevia ohjeita kappaleessa 7.  
Henkilökohtaista suojavarustusta 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 tuuletuksesta/imusta työpaikalla.  
Säiliöt avattava ja käsiteltävä varovasti.
- **Palo- ja räjähdysuojaohteet:** 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 henkilönsuojaimet

- **Lisäohjeita teknisten laitteiden varustukseen:** Ei muita tietoja, ks. kohta 7.
- **8.1 Valvontaa koskevat muuttujat**
- **Aineosat työpaikkakohtaisiin valvottavien raja-arvoihin:** Tarpeeton.
- **Lisäohjeet:** Tiedot perustuvat valmistushetkellä voimassaoleviin luetteloihin.

(jatkuu sivulla 4)

# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 15.05.2015

Tarkistus: 15.05.2015

**Kauppanimike: Lead Citrate, Trihydrate**

(jatkuu sivulla 3)

- **8.2 Altistumisen ehkäiseminen**
- **Henkilökohtainen suojavarustus:**
- **Yleiset suoja- ja hygieniatoimenpiteet:**  
 Pidettävä loitolla elintarvikkeista, juomista ja rehuista.  
 Likaantuneet, aineen saastuttamat vaatekappaleet on riisuttava välittömästi.  
 Kädet on pestävä ennen taukoja ja työn päätyttyä.  
 Suojavaatetus on säilytettävä erikseen.
- **Hengityssuoja:**  
 Lyhytaikaisessa tai vähäisessä altistuksessa hengityssuojasuodin; intensiivisessä tai pitkäaikaisessa rasituksessa ulkoilmasta riippumaton hengityssuojain.
- **Käsisuojus:**  
 Käsinemateriaalin tulee olla tuotetta/ainetta/valmistetta kestävä ja läpäisemätöntä.  
 Puuttuvien testien vuoksi suositusta soveltuvasta suojakäsinemateriaalista tuotteelle/ valmistellelle / 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 suojakäsinemateriaalista 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**  

Sulamispiste/sulamisarvo:	Ei määrätty.
Kiehumispiste/kiehumisarvo:	Ei määrätty.
- **Leimahduspiste:** Ei voida käyttää.
- **Syttyvyys (kiinteä, kaasumainen):** Aine ei ole syttyvä.
- **Syttymislämpötila:**  

Hajaantumislämpötila:	Ei määrätty.
-----------------------	--------------
- **Itsesyttyvyys:** Ei määrätty.
- **Räjähdysvaara:** Tuote ei ole räjähdysvaarallinen.
- **Räjähdysrajat:**  

Alempi:	Ei määrätty.
Ylempi:	Ei määrätty.
- **Höyrypaine:** Ei voida käyttää.
- **Tiheys:** Ei määrätty.

(jatkuu sivulla 5)

# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 15.05.2015

Tarkistus: 15.05.2015

**Kauppanimike: Lead Citrate, Trihydrate**

(jatkuu sivulla 4)

- |                                       |  |
|---------------------------------------|--|
| · Suhteellinen tiheys                 | Ei määrätty.                               |
| · Höyryn tiheys                       | Ei voida käyttää.                          |
| · Höyrystymisnopeus                   | Ei voida käyttää.                          |
| · Liukenevuus/sekoittuvuus veteen:    | Ei määrätty.                               |
| · Jakaantumiskerroin (-oktanoliväsi): | Ei määrätty.                               |
| · 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
- 10.2 Kemiallinen stabiilisuus
- Terminen hajoavuus / vältettävät olosuhteet: Ei hajoantumista 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
- Akuutti myrkyllisyys:
- Ensisijainen ärsyttävä vaikutus:
- iholla: Ei ärsyttävää vaikutusta.
- silmiin: Ei ärsyttävää vaikutusta.
- Herkistymistä: Tiedossa ei ole stabiloivaa vaikutusta.
- CMR-vaikutukset eli syöpää aiheuttavat, perimää vaurioittavat ja lisääntymiselle vaaralliset vaikutukset  
Repr. 1A

### 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
- Ekologisia lisätietoja:
- Yleisohjeita:  
Vesistövaarallisuusluokka 3 (Oma luokitus): voimakkaasti vesistöä vaarantava  
Estetään pääsy pohjaveteen, vesistöihin, viemäristöön; myöskin pieninä määrinä.  
Juomavesi vaaraantuu jo pieninten määrien päästessä maaperään.  
Vesistöihin päästyään myrkyllistä kaloille ja planktonille.  
erittäin myrkyllinen vesieliöille

(jatkuu sivulla 6)

# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 15.05.2015

Tarkistus: 15.05.2015

**Kauppanimike: Lead Citrate, Trihydrate**




(jatkuu sivulla 5)

- **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

- |   |   |
|---|---|
| · <b>14.1 UN-numero</b><br>· <b>ADR, IMDG, IATA</b>   | UN2291  |
| · <b>14.2 Kuljetuksessa käytettävä virallinen nimi</b><br>· <b>ADR</b><br>· <b>IMDG</b><br>· <b>IATA</b>  | 2291 LYIJY-YHDISTE, LIUKENEVA, N.O.S. (Lead Citrate, Trihydrate), YMPÄRISTÖLLE VAARALLINEN LEAD COMPOUND, SOLUBLE, N.O.S., MARINE POLLUTANT<br>LEAD COMPOUND, SOLUBLE, N.O.S. |
| · <b>14.3 Kuljetuksen vaaraluokka</b><br>· <b>ADR, IMDG</b>   |   |
|   |   |
| · <b>luokka</b><br>· <b>Lipuke</b>  | 6.1 Myrkylliset aineet<br>6.1   |
| · <b>IATA</b>   |   |
|    |   |
| · <b>Class</b><br>· <b>Label</b>  | 6.1 Myrkylliset aineet<br>6.1   |
| · <b>14.4 Pakkausryhmä</b><br>· <b>ADR, IMDG, IATA</b>  | III   |
| · <b>14.5 Ympäristövaarat:</b><br>· <b>Marine pollutant:</b><br>· <b>Erityistä merkintää (ADR):</b>   | Ympäristölle vaarallinen aine, kiinteä; Marine Pollutant<br>Kyllä (P)<br>Symboli (kala ja puu)<br>Symboli (kala ja puu)   |
| · <b>14.6 Erityiset varoimet käyttäjälle</b><br>· <b>Kemler-luku:</b>   | Varoitus: Myrkylliset aineet<br>60  |

(jatkuu sivulla 7)

**Käyttöturvallisuustiedote**  
1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 15.05.2015

Tarkistus: 15.05.2015

**Kauppanimike: Lead Citrate, Trihydrate**

(jatkuu sivulla 6)

· <b>EMS-numero:</b>	F-A,S-A
· <b>Segregation groups</b>	Heavy metals and their salts (including their organometallic compounds), lead and its compounds
· <b>14.7 Kuljetus irtolastina Marpol 73/78 -sopimuksen II liitteen ja IBC-säännösten mukaisesti</b>	Ei voida käyttää.
· <b>Kuljetus/lisätietoja:</b>	
· <b>ADR</b>	
· <b>Rajoitetut määrät (LQ)</b>	5 kg
· <b>Poikkeusmäärät (EQ)</b>	Koodi: E1 Enimmäisnettomäärä sisäpakkausta kohti: 30 g Enimmäisnettomäärä ulkopakkausta kohti: 1000 g
· <b>Kuljetuskategoria</b>	2
· <b>Tunnelirajoituskoodi:</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5 kg
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· <b>UN "Model Regulation":</b>	UN2291, LYIJY-YHDISTE, LIUKENEVA, N.O.S. (Lead Citrate, Trihydrate), YMPÄRISTÖLLE VAARALLINEN, 6.1, III

**KOHTA 15: Lainsäädäntöä koskevat tiedot**

- **15.1 Nimenomaisesti ainetta tai seosta koskevat turvallisuus-, terveys- ja ympäristösäännökset tai -lainsäädäntö**  
Merkittäviä lisätietoja ei ole saatavilla.
- **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 lyhennykset:**  
ADR: Accord européen sur le transport 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  
P: Marine Pollutant  
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)  
Acute Tox. 4: Acute toxicity, Hazard Category 4  
Repr. 1A: Reproductive toxicity, Hazard Category 1A  
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2  
Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 15.05.2015

Révision: 15.05.2015

### SECTION 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: sgkcck@aol.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

### SECTION 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.

(suite page 2)



# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 15.05.2015

Révision: 15.05.2015

Nom du produit: *dicitrate de triplomb*

(suite de la page 1)

· **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.**P281 Utiliser l'équipement de protection individuel requis.**P301+P312 EN CAS D'INGESTION: Appeler un CENTRE ANTIPOISON/un médecin en cas de malaise.**P304+P340 EN CAS D'INHALATION: transporter la victime à l'extérieur et la maintenir au repos 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.

### SECTION 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

### SECTION 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.*· **Après contact avec les yeux:***Rincer les yeux, sous l'eau courante, pendant plusieurs minutes, en écartant bien les paupières.*

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- **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.

### SECTION 5: Mesures de lutte contre l'incendie

- **5.1 Moyens d'extinction**
- **Moyens d'extinction:**  
CO<sub>2</sub>, poudre d'extinction ou eau pulvérisée. Combattre les foyers importants avec de l'eau pulvérisée ou de la mousse résistant à l'alcool.
- **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.

### SECTION 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 sections**  
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.

### SECTION 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.

### SECTION 8: Contrôles de l'exposition/protection individuelle

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

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### · 8.1 Paramètres de contrôle

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

**512-26-5 dicitrate de triplomb**

VME	Valeur à long terme: 0,15 mg/m <sup>3</sup> en Pb
-----	--

#### · 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.

## SECTION 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:	Non déterminé.
Point d'ébullition:	Non déterminé.

· Point d'éclair Non applicable.

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

#### · Température d'inflammation:

Température de décomposition: Non déterminé.

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· <b>Auto-inflammation:</b>	Non déterminé.
· <b>Danger d'explosion:</b>	Le produit n'est pas explosif.
· <b>Limites d'explosion:</b> <b>Inférieure:</b> <b>Supérieure:</b>	Non déterminé. Non déterminé.
· <b>Pression de vapeur:</b>	Non applicable.
· <b>Densité:</b> · <b>Densité relative</b> · <b>Densité de vapeur.</b> · <b>Vitesse d'évaporation</b>	Non déterminée. Non déterminé. Non applicable. Non applicable.
· <b>Solubilité dans/miscibilité avec l'eau:</b>	Non déterminé.
· <b>Coefficient de partage (n-octanol/eau):</b>	Non déterminé.
· <b>Viscosité:</b> <b>Dynamique:</b> <b>Cinématique:</b>	Non applicable. Non applicable.
· <b>9.2 Autres informations</b>	Pas d'autres informations importantes disponibles.

### SECTION 10: Stabilité et réactivité

- **10.1 Réactivité**
- **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

### SECTION 11: Informations toxicologiques

- **11.1 Informations sur les effets toxicologiques**
- **Toxicité aiguë:**
- **Effet primaire d'irritation:**
- **de la peau:** Pas d'effet d'irritation.
- **des yeux:** Pas d'effet d'irritation.
- **Sensibilisation:** Aucun effet de sensibilisation connu.
- **Effets CMR (cancérogène, mutagène et toxique pour la reproduction)**  
Repr. 1A

### SECTION 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.

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- **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.

### SECTION 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.

### SECTION 14: Informations relatives au transport

- |   |   |
|---|---|
| · <b>14.1 No ONU</b>  |   |
| · <b>ADR, IMDG, IATA</b>  | UN2291  |
| · <b>14.2 Nom d'expédition des Nations unies</b>                                    |   |
| · <b>ADR</b>  | 2291 COMPOSÉ SOLUBLE DU PLOMB, N.S.A.<br>(dicitrate de triplomb), DANGEREUX POUR<br>L'ENVIRONNEMENT |
| · <b>IMDG</b>   | LEAD COMPOUND, SOLUBLE, N.O.S., MARINE<br>POLLUTANT   |
| · <b>IATA</b>   | LEAD COMPOUND, SOLUBLE, N.O.S.  |
| · <b>14.3 Classe(s) de danger pour le transport</b>                                 |   |
| · <b>ADR, IMDG</b>  |   |
|  |   |
|  |   |
| · <b>Classe</b>   | 6.1 Matières toxiques.  |
| · <b>Étiquette</b>  | 6.1   |
| · <b>IATA</b>   |   |
|  |   |
| · <b>Class</b>  | 6.1 Matières toxiques.  |
| · <b>Label</b>  | 6.1   |

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· <b>14.4 Groupe d'emballage</b> · <b>ADR, IMDG, IATA</b>	<b>III</b>
· <b>14.5 Dangers pour l'environnement:</b> · <b>Marine Pollutant:</b> · <b>Marquage spécial (ADR):</b>	<i>Matière dangereuse du point de vue de l'environnement, solide; Marine Pollutant</i> <i>Oui (P)</i> <i>Signe conventionnel (poisson et arbre)</i> <i>Signe conventionnel (poisson et arbre)</i>
· <b>14.6 Précautions particulières à prendre par l'utilisateur</b> · <b>Indice Kemler:</b> · <b>No EMS:</b> · <b>Segregation groups</b>	<i>Attention: Matières toxiques.</i> <i>60</i> <i>F-A,S-A</i> <i>Heavy metals and their salts (including their organometallic compounds), lead and its compounds</i>
· <b>14.7 Transport en vrac conformément à l'annexe II de la convention Marpol 73/78 et au recueil IBC</b>	<i>Non applicable.</i>
· <b>Indications complémentaires de transport:</b>	
· <b>ADR</b> · <b>Quantités limitées (LQ)</b> · <b>Quantités exceptées (EQ)</b>	<i>5 kg</i> <i>Code: E1</i> <i>Quantité maximale nette par emballage intérieur: 30 g</i> <i>Quantité maximale nette par emballage extérieur: 1000 g</i>
· <b>Catégorie de transport</b> · <b>Code de restriction en tunnels</b>	<i>2</i> <i>E</i>
· <b>IMDG</b> · <b>Limited quantities (LQ)</b> · <b>Excepted quantities (EQ)</b>	<i>5 kg</i> <i>Code: E1</i> <i>Maximum net quantity per inner packaging: 30 g</i> <i>Maximum net quantity per outer packaging: 1000 g</i>
· <b>"Règlement type" de l'ONU:</b>	<i>UN2291, COMPOSÉ SOLUBLE DU PLOMB, N.S.A. (dicitrate de triplomb), DANGEREUX POUR L'ENVIRONNEMENT, 6.1, III</i>

### SECTION 15: Informations réglementaires

- **15.1 Réglementations/législation particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement**  
*Pas d'autres informations importantes disponibles.*
- **15.2 Évaluation de la sécurité chimique:** *Une évaluation de la sécurité chimique n'a pas été réalisée.*

### SECTION 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 européen sur le transport des marchandises dangereuses par Route*  
*IMDG: International Maritime Code for Dangerous Goods*  
*IATA: International Air Transport Association*

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**selon 1907/2006/CE, Article 31**

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*P: Marine Pollutant**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)**Acute Tox. 4: Acute toxicity, Hazard Category 4**Repr. 1A: Reproductive toxicity, Hazard Category 1A**STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2**Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1**Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1*

FR

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 15.05.2015

überarbeitet am: 15.05.2015

### ABSCHNITT 1: Bezeichnung des Stoffs bzw. 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: sgkcck@aol.com

www.emsdiasum.com

Science Services GmbH

Unterhachinger Str. 75

81737 München Germany

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

safety@scienceservices.de

24h Giftnotruf Munchen: +49 (0)89 19240

Toxikologische Abteilung der II. Medizinischen Klinik

rechts der Isar, Munchen. - www.toxinfo.org

· **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

Aquatic Acute 1

H400

Sehr giftig für Wasserorganismen.

Aquatic Chronic 1

H410

Sehr giftig für Wasserorganismen mit langfristiger Wirkung.

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

(Fortsetzung von Seite 1)



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.*  
 P281      *Vorgeschriebene persönliche Schutzausrüstung verwenden.*  
 P301+P312 *BEI VERSCHLUCKEN: Bei Unwohlsein GIFTINFORMATIONSZENTRUM/Arzt anrufen.*  
 P304+P340 *BEI EINATMEN: An die frische Luft bringen und in einer Position ruhigstellen, die das Atmen erleichtert.*  
 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:**

CO<sub>2</sub>, Löschpulver oder Wassersprühstrahl. Größeren Brand mit Wassersprühstrahl oder alkoholbeständigem Schaum bekämpfen.

· **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 Methoden 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.

(Fortsetzung auf Seite 4)

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- **7.2 Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten**
- **Lagerung:**
- **Anforderung an Lagerräume und Behälter:** Keine besonderen Anforderungen.
- **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

- **Zusätzliche Hinweise zur Gestaltung technischer Anlagen:** Keine weiteren Angaben, siehe Abschnitt 7.
- **8.1 Zu überwachende Parameter**
- **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.

(Fortsetzung auf Seite 5)

# Sicherheitsdatenblatt

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(Fortsetzung von Seite 4)

· <b>Zustandsänderung</b>	
<b>Schmelzpunkt/Schmelzbereich:</b>	<i>Nicht bestimmt.</i>
<b>Siedepunkt/Siedebereich:</b>	<i>Nicht bestimmt.</i>
· <b>Flammpunkt:</b>	<i>Nicht anwendbar.</i>
· <b>Entzündlichkeit (fest, gasförmig):</b>	<i>Der Stoff ist nicht entzündlich.</i>
· <b>Zündtemperatur:</b>	
<b>Zersetzungstemperatur:</b>	<i>Nicht bestimmt.</i>
· <b>Selbstentzündlichkeit:</b>	<i>Nicht bestimmt.</i>
· <b>Explosionsgefahr:</b>	<i>Das Produkt ist nicht explosionsgefährlich.</i>
· <b>Explosionsgrenzen:</b>	
<b>Untere:</b>	<i>Nicht bestimmt.</i>
<b>Obere:</b>	<i>Nicht bestimmt.</i>
· <b>Dampfdruck:</b>	<i>Nicht anwendbar.</i>
· <b>Dichte:</b>	<i>Nicht bestimmt.</i>
· <b>Relative Dichte</b>	<i>Nicht bestimmt.</i>
· <b>Dampfdichte</b>	<i>Nicht anwendbar.</i>
· <b>Verdampfungsgeschwindigkeit</b>	<i>Nicht anwendbar.</i>
· <b>Löslichkeit in / Mischbarkeit mit Wasser:</b>	<i>Nicht bestimmt.</i>
· <b>Verteilungskoeffizient (n-Octanol/Wasser):</b>	<i>Nicht bestimmt.</i>
· <b>Viskosität:</b>	
<b>Dynamisch:</b>	<i>Nicht anwendbar.</i>
<b>Kinematisch:</b>	<i>Nicht anwendbar.</i>
· <b>9.2 Sonstige Angaben</b>	<i>Keine weiteren relevanten Informationen verfügbar.</i>

### ABSCHNITT 10: Stabilität und Reaktivität

- **10.1 Reaktivität**
- **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:**
- **Primäre Reizwirkung:**
- **an der Haut:** *Keine Reizwirkung.*
- **am Auge:** *Keine Reizwirkung.*
- **Sensibilisierung:** *Keine sensibilisierende Wirkung bekannt.*

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- **CMR-Wirkungen (krebserzeugende, erbgutverändernde und fortpflanzungsgefährdende Wirkung)**
- Repr. 1A


### 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

- |   |  |
|---|--|
| <b>14.1 UN-Nummer</b>   |  |
| <b>ADR, IMDG, IATA</b>  | UN2291   |
| <b>14.2 Ordnungsgemäße UN-Versandbezeichnung</b>                                    |  |
| <b>ADR</b>  | 2291 BLEIVERBINDUNG, LÖSLICH, N.A.G. (Blei-II-citrat-3-hydrat), UMWELTGEFÄHRDEND |
| <b>IMDG</b>   | LEAD COMPOUND, SOLUBLE, N.O.S., MARINE POLLUTANT                                 |
| <b>IATA</b>   | LEAD COMPOUND, SOLUBLE, N.O.S.   |
| <b>14.3 Transportgefahrenklassen</b>  |  |
| <b>ADR, IMDG</b>  |  |
|  |  |
| <b>Klasse</b>   | 6.1 Giftige Stoffe   |

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· <b>Gefahrzettel</b>	6.1
· <b>IATA</b>	
	
· <b>Class</b>	6.1 Giftige Stoffe
· <b>Label</b>	6.1
· <b>14.4 Verpackungsgruppe</b>	
· <b>ADR, IMDG, IATA</b>	III
· <b>14.5 Umweltgefahren:</b>	Umweltgefährdender Stoff, fest; Marine Pollutant
· <b>Marine pollutant:</b>	Ja (P)
	Symbol (Fisch und Baum)
· <b>Besondere Kennzeichnung (ADR):</b>	Symbol (Fisch und Baum)
· <b>14.6 Besondere Vorsichtsmaßnahmen für den Verwender</b>	Achtung: Giftige Stoffe
· <b>Kemler-Zahl:</b>	60
· <b>EMS-Nummer:</b>	F-A,S-A
· <b>Segregation groups</b>	Heavy metals and their salts (including their organometallic compounds), lead and its compounds
· <b>14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens 73/78 und gemäß IBC-Code</b>	Nicht anwendbar.
· <b>Transport/weitere Angaben:</b>	
· <b>ADR</b>	
· <b>Begrenzte Menge (LQ)</b>	5 kg
· <b>Freigestellte Mengen (EQ)</b>	Code: E1
	Höchste Nettomenge je Innenverpackung: 30 g
	Höchste Nettomenge je Außenverpackung: 1000 g
· <b>Beförderungskategorie</b>	2
· <b>Tunnelbeschränkungscode</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5 kg
· <b>Excepted quantities (EQ)</b>	Code: E1
	Maximum net quantity per inner packaging: 30 g
	Maximum net quantity per outer packaging: 1000 g
· <b>UN "Model Regulation":</b>	UN2291, BLEIVERBINDUNG, LÖSLICH, N.A.G. (Blei-II-citrat-3-hydrat), UMWELTGEFÄHRDEND, 6.1, III

### ABSCHNITT 15: Rechtsvorschriften

- **15.1 Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften für den Stoff oder das Gemisch**
- **Nationale Vorschriften:**
- **Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV): -**

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· **Technische Anleitung Luft:**

Klasse	Anteil in %
I	100,0

- **Wassergefährdungsklasse: WGK 3 (Selbsteinstufung): stark wassergefährdend.**
- **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 européen sur le transport 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*

*P: Marine Pollutant*

*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)*

*Acute Tox. 4: Acute toxicity, Hazard Category 4*

*Repr. 1A: Reproductive toxicity, Hazard Category 1A*

*STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2*

*Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1*

*Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1*

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

Stampato il: 15.05.2015

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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 pertinenti identificati della sostanza o 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: sgkcck@aol.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

Acute Tox. 4

H302

Nocivo se ingerito.

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*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.**P281 Utilizzare il dispositivo di protezione individuale richiesto.**P301+P312 IN CASO DI INGESTIONE: contattare un CENTRO ANTIVELENI/un medico in caso di malessere.**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***Numeri 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.***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.*

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- **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 della 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:**  
CO<sub>2</sub>, polvere o acqua nebulizzata. Estinguere gli incendi di grosse dimensioni con acqua nebulizzata o con schiuma resistente all'alcool.
- **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 un 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 l'immagazzinamento 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 specifici** Non sono disponibili altre informazioni.

### **SEZIONE 8: Controllo dell'esposizione/protezione individuale**

- **Ulteriori indicazioni sulla struttura di impianti tecnici:** Nessun dato ulteriore, vedere punto 7.
- **8.1 Parametri di controllo**
- **Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:** Non Necessario.

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- **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:**

<b>Forma:</b>	Solido
<b>Colore:</b>	Non definito.
<b>Odore:</b>	Caratteristico
<b>Soglia olfattiva:</b>	Non definito.

· **valori di pH:** Non applicabile.

· **Cambiamento di stato**

<b>Temperatura di fusione/ambito di fusione:</b>	Non definito.
<b>Temperatura di ebollizione/ambito di ebollizione:</b>	Non definito.

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

· **Infiammabilità (solido, gassoso):** Sostanza non infiammabile.

· **Temperatura di accensione:**

**Temperatura di decomposizione:** Non definito.

· **Autoaccensione:** Non definito.

· **Pericolo di esplosione:** Prodotto non esplosivo.

· **Limiti di infiammabilità:**

<b>Inferiore:</b>	Non definito.
<b>Superiore:</b>	Non definito.

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· <b>Tensione di vapore:</b>	<i>Non applicabile.</i>
· <b>Densità:</b>	<i>Non definito.</i>
· <b>Densità relativa</b>	<i>Non definito.</i>
· <b>Densità del vapore</b>	<i>Non applicabile.</i>
· <b>Velocità di evaporazione</b>	<i>Non applicabile.</i>
· <b>Solubilità in/Miscibilità con acqua:</b>	<i>Non definito.</i>
· <b>Coefficiente di distribuzione (n-Octanol/acqua):</b>	<i>Non definito.</i>
· <b>Viscosità:</b>	
· <b>Dinamica:</b>	<i>Non applicabile.</i>
· <b>Cinematica:</b>	<i>Non applicabile.</i>
· <b>9.2 Altre informazioni</b>	<i>Non sono disponibili altre informazioni.</i>

### SEZIONE 10: Stabilità e reattività

- **10.1 Reattività**
- **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:**
- **Irritabilità primaria:**
- **sulla pelle:** *Non ha effetti irritanti.*
- **sugli occhi:** *Non irritante.*
- **Sensibilizzazione:** *Non si conoscono effetti sensibilizzanti.*
- **Effetti CMR (cancerogenicità, mutagenicità e tossicità per la riproduzione)**  
*Repr. 1A*

### 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.*

(continua a pagina 6)

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

Stampato il: 15.05.2015

Revisione: 15.05.2015

**Denominazione commerciale:** dicitrato di tripiombo

(Segue da pagina 5)

- 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

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>· <b>14.1 Numero ONU</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | <p align="center">UN2291</p>  |
| <ul style="list-style-type: none"> <li>· <b>14.2 Nome di spedizione dell'ONU</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG</b></li> <li>· <b>IATA</b></li> </ul>          | <p align="center">2291 COMPOSTO SOLUBILE DEL PIOMBO, N.A.S.<br/>(dicitrato di tripiombo), PERICOLOSO PER L'AMBIENTE<br/>LEAD COMPOUND, SOLUBLE, N.O.S., MARINE<br/>POLLUTANT<br/>LEAD COMPOUND, SOLUBLE, N.O.S.</p> |
| <ul style="list-style-type: none"> <li>· <b>14.3 Classi di pericolo connesso al trasporto</b></li> <li>· <b>ADR, IMDG</b></li> </ul>                                     | <p align="center">6.1 Materie tossiche<br/>6.1</p>  |
| <ul style="list-style-type: none"> <li>· <b>IATA</b></li> </ul>  | <p align="center">6.1 Materie tossiche<br/>6.1</p>  |
| <ul style="list-style-type: none"> <li>· <b>14.4 Gruppo di imballaggio</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>  | <p align="center">III</p>   |
| <ul style="list-style-type: none"> <li>· <b>14.5 Pericoli per l'ambiente:</b></li> <li>· <b>Marine pollutant:</b></li> <li>· <b>Marcatura speciali (ADR):</b></li> </ul> | <p align="center">Materia pericolosa dal punto di vista dell'ambiente, solida;<br/>Marine Pollutant<br/>Sì (P)<br/>Simbolo (pesce e albero)<br/>Simbolo (pesce e albero)</p>  |

(continua a pagina 7)

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

Stampato il: 15.05.2015

Revisione: 15.05.2015

**Denominazione commerciale: dicitrato di tripiombo**

(Segue da pagina 6)

<ul style="list-style-type: none"> <li>· <b>14.6 Precauzioni speciali per gli utilizzatori</b></li> <li>· <b>Numero Kemler:</b></li> <li>· <b>Numero EMS:</b></li> <li>· <b>Segregation groups</b></li> </ul>	<p>Attenzione: Materie tossiche 60 F-A,S-A Heavy metals and their salts (including their organometallic compounds), lead and its compounds</p>
<ul style="list-style-type: none"> <li>· <b>14.7 Trasporto di rifiuti secondo l'allegato II di MARPOL 73/78 ed il codice IBC</b></li> </ul>	Non applicabile.
<p>· <b>Trasporto/ulteriori indicazioni:</b></p>	
<ul style="list-style-type: none"> <li>· <b>ADR</b></li> <li>· <b>Quantità limitate (LQ)</b></li> <li>· <b>Quantità esenti (EQ)</b></li> </ul>	<p>5 kg Codice: E1 Quantità massima netta per imballaggio interno: 30 g Quantità massima netta per imballaggio esterno: 1000 g</p>
<ul style="list-style-type: none"> <li>· <b>Categoria di trasporto</b></li> <li>· <b>Codice di restrizione in galleria</b></li> </ul>	<p>2 E</p>
<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	<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"> <li>· <b>UN "Model Regulation":</b></li> </ul>	UN2291, COMPOSTO SOLUBILE DEL PIOMBO, N.A.S. (dicitrato di tripiombo), PERICOLOSO PER L'AMBIENTE, 6.1, III

### SEZIONE 15: Informazioni sulla regolamentazione

- **15.1 Norme e legislazione su salute, sicurezza e ambiente specifiche per la sostanza o la miscela**  
Non sono disponibili altre informazioni.
- **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 européen sur le transport 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  
 P: Marine Pollutant  
 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)  
 Acute Tox. 4: Acute toxicity, Hazard Category 4  
 Repr. 1A: Reproductive toxicity, Hazard Category 1A  
 STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2  
 Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1  
 Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.05.15

개정: 2015.05.15

### 1 화학제품과 회사에 관한 정보

- **제품 식별자**
- **제품명:** Lead Citrate, Trihydrate
- **상품번호:** 17800, 17810
- **CAS-번호**  
512-26-5
- **EC 의번호:**  
208-141-1
- **색인 번호:**  
082-001-00-6
- **해당 순물질이나 혼합물의 관련 하위용도 및 사용금지용도** 추가적인 정보가 존재하지 않습니다.
- **제품의 권고 용도와 사용상의 제한:** 실험실 화학품
- **안전데이터표(Safety Data Sheet)내 공급업체 관련 상세 정보**
- **제조자/수입자/유통업자 정보:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.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
- **추가적인 정보 획득 가능:** Product safety department
- **비상연락 전화번호:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 유해성.위험성

· **순물질 또는 혼합물의 분류**



건강에 위험

생식 독성 구분1A                      H360 태아 또는 생식능력에 손상을 일으킬 수 있음  
 표적장기-반복노출 구분2            H373 장기간 또는 반복노출 되면 신체 중에 손상을 일으킬 수 있음



환경

수생환경유해성-급성 구분1 H400 수생생물에 매우 유독함  
 수생환경유해성-만성 구분1 H410 장기적인 영향에 의해 수생생물에게 매우 유독함



급성 독성(경구) 구분4                  H302 삼키면 유해함  
 급성 독성(흡입) 구분4                H332 흡입하면 유해함

(2 쪽에 계속)

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.05.15

개정: 2015.05.15

**제품명: Lead Citrate, Trihydrate**

(1 쪽부터계속)

- 라벨표기 요소
- GHS 라벨 요소
- 그림문자



GHS07    GHS08    GHS09

- 신호어 위험
- 유해.위험 문구
  - 삼키거나 흡입하면 유해함.
  - 태아 또는 생식능력에 손상을 일으킬 수 있음
  - 장기간 또는 반복노출 되면 신체 중에 손상을 일으킬 수 있음
  - 장기적인 영향에 의해 수생생물에게 매우 유독함
- 예방조치 문구
  - (분진·흡·가스·미스트·증기·스프레이)를(을) 흡입하지 마시오.
  - (보호장갑·보호의·보안경·안면보호구)를(을) 착용하십시오.
  - 삼켰을 시: 몸에 이상이 있을 시 독성물질 센터/병원 연락 필요.
  - 흡입하면 신선한 공기가 있는 곳으로 옮기고 호흡하기 쉬운 자세로 안정을 취하십시오.
  - 잠금장치가 있는 저장장소에 저장하십시오.
  - 현지/지역/국가/국제 규정에 따라서 내용물/용기 노출
- 기타 유해성
  - PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과
  - PBT(잔류성, 생물농축성, 독성 물질): 해당사항 없음.
  - vPvB(고 잔류성, 고 생물농축성 물질): 해당사항 없음.

### 3 구성성분의 명칭 및 함유량

- 화학적 특성: 화학물질
- CAS-번호표시  
512-26-5 Lead Citrate, Trihydrate
- 식별 번호
- EC 의번호: 208-141-1
- 색인 번호: 082-001-00-6

### 4 응급조치 요령

- 응급조치요령 내용
- 일반적 정보:
  - 중독 증상은 몇 시간 이 지난 뒤에 발생할 수 있다. 따라서 사고가 발생한 후에 적어도 48 시간 동안은 의료진의 관찰을 받아야 한다.
- 흡입했을 때:
  - 신선한 공기를 쐬고, 필요할 경우에는 산소 호흡기의 도움을 받는다. 환자를 따뜻하게 하고, 증상이 지속될 경우에는 의료진의 도움을 구한다.
  - 환자가 의식을 잃었을 경우에는 안전한 자세에서 환자를 운반한다.
- 피부에 접촉했을 때: 일반적으로 이 제품은 피부에 자극적이지 않다.
- 눈에 들어갔을 때: 흐르는 물에 눈을 몇분동안 씻어낸다.
- 먹었을 때: 즉시 의사의 도움을 구한다.
- 가장 중요한 급·만성 증상 및 영향 추가적인 정보가 존재하지 않습니다.

(3 쪽에계속)



# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.05.15

개정: 2015.05.15

**제품명:** Lead Citrate, Trihydrate

- **즉각적인 의료처치 및 특별치료가 필요함을 시사하는 징후** 추가적인 정보가 존재하지 않습니다. (2 쪽부터 계속)

### 5 폭발·화재시 대처방법

- **소화제**
- **적절한 소화제:**  
이산화탄소, 진화용 석회 가루 또는 물 방사를 사용하고, 더 큰 화재는 물을 분사하거나 알코올이 함유된 거품으로 끈다.
- **본 화학물질이나 혼합물에서 발생하는 특별 유해성** 추가적인 정보가 존재하지 않습니다.
- **소방관에 대한 권고사항**
- **화재 진압 시 착용할 보호구 및 예방조치:** 호흡보호장비설치.

### 6 누출 사고 시 대처방법

- **개인적 예방조치, 보호장비 및 응급처치 절차** 필요없음.
- **환경 관련 예방조치:**  
하천이나 하수로 유입되었을 경우 해당 관청에 보고한다.  
하수도망/해수면 위의 물/지하수로 도달하지 않게 한다.
- **밀폐 및 정화 방법과 소재:**  
항목 13에 따라 오염된 물질을 쓰레기로 처분한다.  
충분한 환기가 되도록 한다.
- **타 섹션 참조**  
안전 관리에 대한 정보는 제7 장을 참고하십시오.  
개인 보호 장비에 대한 정보는 제8 장을 참고하십시오.  
쓰레기 처리에 대한 정보는 제13 장을 참고하십시오.

### 7 취급 및 저장방법

- **안전 취급을 위한 예방조치**  
철저한 먼지 제거.  
작업장에서는 통풍이 잘 되고/습기 제거가 잘 되게 주의한다.  
조심스럽게 용기를 개봉하거나 취급한다.
- **화재 및 폭발 사고 예방대책에 관한 정보:** 호흡보호장비를 항상 비치한다.
- **혼합 위험성 등 안전 저장 조건**
- **보관:**  
· **안전한 저장 방법:** 특별한 요구사항이 없음.  
· **하나의 공동 보관 시설에 대한 보관 관련 정보:** 필요없음  
· **보관 조건에 관한 추가적인 정보:** 용기를 새지 않게 밀폐한 채 보관한다.  
· **구체적 최종 사용자** 추가적인 정보가 존재하지 않습니다.

### 8 노출방지 및 개인보호구

- **첨단시설 디자인에 대한 추가정보:** 더 이상 의 자료는 없음. 항목 7을 참고하십시오.
- **통제 변수**
- **화학물질의 노출기준, 생물학적 노출기준 등:** 생략
- **추가 정보:** 제조할 당시에 유효한 목록을 기초로 사용했다.

(4 쪽에 계속)

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.05.15

개정: 2015.05.15

**제품명: Lead Citrate, Trihydrate**

(3 쪽부터계속)

- **노출 통제**
- **개인 보호구**
- **일반적보호조치및위생조치:**  
 · 식료품, 음료수와 사료로부터 멀리떨어뜨려 놓는다.  
 · 더러워지거나 음료수가 묻은 옷은 즉시 탈의한다.  
 · 휴식 전 이 나 작업이 끝날때마다 손을 씻는다.  
 · 방호복은 따로보관한다.
- **호흡기 보호:**  
 · 단 시간 또는 경미한 오염의 경우에는 호흡 여과기를 사용한다. 심각한 또는 장기간 노출시에는 호흡보호장비를 사용한다.
- **손 보호:**  
 · 장갑재질은제품 / 원료 / 조제를투과시키지않아야하고, 내구성이있어야한다.  
 · 테스트를 하지 않았기 때문에 제품 / 조제 / 화학 혼합물에 적합한 장갑재질에 대한 추천이 없다.  
 · 투과 시간, 침투율과 저하를 고려해서 장갑 재료를 선택한다.
- **장갑의재료**  
 · 적합한장갑의선정은재질차이뿐아니라품질기준의차이도고려하여이루어져야하고제조업자에따라서도다르게선정되어야한다.
- **장갑재료의투과시간** 정확한관통시간은보호장갑제조자에의하여인지되고, 준수되어야한다.
- **눈 보호:** 필요 없음.

### 9 물리화학적 특성

· **기본 물리 및 화학적 특성에 대한 정보**

· **일반정보**

· **외형**

- |           |        |
|-----------|--------|
| · 물리적 상태: | 고체     |
| · 색:      | 알맞지않다. |
| · 냄새:     | 특색있는   |
| · 후각역치    | 알맞지않다. |

· pH: 해당사항 없음.

· **상태변화**

- |                   |      |
|-------------------|------|
| · 녹는점/어는점:        | 맞지않는 |
| · 초기 끓는점과 끓는점 범위: | 맞지않는 |

· 인화점: 해당사항 없음.

· 인화성(고체, 기체): 이 제품은 가연성이 없다.

· **점화온도:**

· 분해 온도: 알맞지않다.

· 자기점화: 알맞지않다.

· 폭발위험: 이 제품은 폭발위험성이 없다

· **인화 또는 폭발 범위의 상한/하한**

- |        |        |
|--------|--------|
| · 아래로: | 알맞지않다. |
| · 위로:  | 알맞지않다. |

· 증기압: 해당사항 없음.

· 밀도: 맞지않는다.

· 비중: 알맞지않다.

· 증기밀도: 해당사항 없음.

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# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.05.15

개정: 2015.05.15

**제품명:** Lead Citrate, Trihydrate

(4 쪽부터계속)

· <b>증발 속도:</b>	해당사항 없음.
· <b>용해도:</b> · 물:	알맞지않다.
· <b>n 옥탄올/물 분배계수:</b>	알맞지않다.
· <b>점도:</b> · <b>역학성:</b> · <b>등점성:</b> · <b>기타 정보</b>	해당사항 없음. 해당사항 없음. 추가적인 정보가 존재하지 않습니다.

### 10 안정성 및 반응성

- 반응성
- 화학적 안정성
- 화학적 안정성 및 유해 반응의 가능성 / 피해야 할 조건: 규정에따라사용할경우해체는없다
- 유해반응 가능성 위험한반응으로는알려지지않았다.
- 피해야 할 조건 추가적인 정보가 존재하지 않습니다.
- 혼합 금지 물질: 추가적인 정보가 존재하지 않습니다.
- 유해분해물질: 위험성있는분해물들은알려지지않았다.

### 11 독성에 관한 정보

- 독성학적 영향에 대한 정보
- 급성 독성:
- 일차적 자극 효과:
- 피부 부식성 또는 자극성: 무자극
- 심한 눈 손상 또는 자극성: 무자극.
- 감각화: 민감한영향이없는것으로알려져있다.
- 다음 종류의 잠재적인 효과에 대한 정보
- CMR-효과 (암 유발, 돌연변이성 그리고 생식 독성)  
생식 독성 구분1A

### 12 환경에 미치는 영향

- 독성
- 수생독성: 추가적인 정보가 존재하지 않습니다.
- 지속성 및 분해성 추가적인 정보가 존재하지 않습니다.
- 생물농축 잠재성 추가적인 정보가 존재하지 않습니다.
- 토양내 이동성 추가적인 정보가 존재하지 않습니다.
- 생태독성:
- 의견: 어류 에 매우 독성임
- 추가적인 생태학 정보:
- 일반 특징:  
수질오염등급 3 (자체등급분류): 심하게수질오염이된 지하수나, 하천으로또는하수도망에도달하지않게한다. 역시극소수의양이라도안된다. 지하수로아주미세한양이유입되었을경우엔이미식수오염상태이다 하천에서는역시물고기나플랑크톤게는독성이있다. 물속의유기체에아주독이되는것
- PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과
- PBT(잔류성, 생물농축성, 독성 물질): 해당사항 없음.

(6 쪽에계속)

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.05.15

개정: 2015.05.15

**제품명:** Lead Citrate, Trihydrate



(5 쪽부터계속)

- vPvB(고 잔류성, 고 생물농축성 물질): 해당사항 없음.
- 기타 부작용 추가적인 정보가 존재하지 않습니다.

### 13 폐기시 주의사항

- 폐기물 처리 방법
- 권고: 생활쓰레기와함께처리되어서는안된다. 하수도망으로유입되어서는안된다.
- 비위생적 포장:
- 권고: 당국의지침에입각한쓰레기처리.

### 14 운송에 필요한 정보

· 유엔 번호 · ADR, IMDG, IATA	UN2291
· UN 적정 선적명 · ADR	2291 LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS
· IMDG · IATA	LEAD COMPOUND, SOLUBLE, N.O.S., MARINE POLLUTANT LEAD COMPOUND, SOLUBLE, N.O.S.
· 교통 위험 클래스 · ADR, IMDG	
	
· 등급 · 위험물 라벨	6.1 독성물질 6.1
· IATA	
	
· Class · Label	6.1 독성물질 6.1
· 용기등급 · ADR, IMDG, IATA	III
· 환경적 유해물질: · 해양오염물질:	이물질은환경을오염시킨다; 해상오염 네 (P) 심벌 (물고기와 나무)
· 특수 마킹 (ADR):	심벌 (물고기와 나무)
· 이용자 특별 예방조치 · 위험 코드: · EMS-번호:	경고: 독성물질 60 F-A,S-A

(7 쪽에계속)

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.05.15

개정: 2015.05.15

**제품명: Lead Citrate, Trihydrate**

(6 쪽부터계속)

<ul style="list-style-type: none"> <li>· Segregation groups</li> </ul>	Heavy metals and their salts (including their organometallic compounds), lead and its compounds
<ul style="list-style-type: none"> <li>· MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따른 벌크(bulk) 운송</li> </ul>	해당사항 없음.
-----	
· 운 송/추 가 정 보:	
<ul style="list-style-type: none"> <li>· ADR</li> <li>· 한정 수량 (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul>	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"> <li>· 운송 구분</li> <li>· 터널 제한 코드</li> </ul>	2 E
-----	
<ul style="list-style-type: none"> <li>· IMDG</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul>	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"> <li>· UN "모범 규제":</li> </ul>	UN2291, LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS, 6.1, III

### 15 법적 규제현황

- 해당 순물질 또는 혼합물에 대한 안전, 보건 및 환경 규제/법률
- GHS 라벨 요소  
본 화학물질은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.
- 위험 도표



- 표지어 위험
- 위험 문구  
삼키거나 흡입하면 유해함.  
태아 또는 생식능력에 손상을 일으킬 수 있음  
장기간 또는 반복노출 되면 신체 중에 손상을 일으킬 수 있음  
장기적인 영향에 의해 수생생물에게 매우 유독함
- 주의 문구  
(분진·흙·가스·미스트·증기·스프레이)를(을) 흡입하지 마시오.  
(보호장갑·보호의·보안경·안면보호구)를(을) 착용 하시오.  
삼켰을 시: 몸에 이상이 있을 시 독성물질 센터/병원 연락 필요.  
흡입하면 신선한 공기가 있는 곳으로 옮기고 호흡하기 쉬운 자세로 안정을 취 하시오.  
잠금장치가 있는 저장장소에 저장 하시오.  
현지/지역/국가/국제 규정에 따라서 내용물/용기 노출

(8 쪽에계속)

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.05.15

개정: 2015.05.15

**제품명: Lead Citrate, Trihydrate**· **화학물질 안전성 평가:** 화학물질 안전성 평가가 수행되지 않음

(7 쪽부터계속)

### 16 그 밖의 참고사항

이보고는우리지식에대한오늘날의상태에대하여평가하고있다, 하지만이보고서는생산특성에관한보증은  
기술하지않았으며계약적인법률관계에기반을두고있지도않다

- **최초 작성일자:** 2015.05.15
- **개정 횟수 및 최종 개정일자:** 1 / 2015.05.15
- **약어와 두문자어:**

ADR: Accord européen sur le transport 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

P: Marine Pollutant

EINECS: European Inventory of Existing Commercial Chemical Substances

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

급성 독성(경구) 구분4: Acute toxicity, Hazard Category 4

생식 독성 구분1A: Reproductive toxicity, Hazard Category 1A

표적장기-반복노출 구분2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

수생환경유해성-급성 구분1: Hazardous to the aquatic environment - AcuteHazard, Category 1

수생환경유해성-만성 구분1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

KR

# Sikkerhetsdatablad

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

Trykkdato: 15.05.2015

revidert den: 15.05.2015

## Avsnitt 1: Identifikasjon av kjemikaliyet og ansvarlig firma

- **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 anvendelser av stoffet eller stoffblandingen, samt anvendelser som frarådes**  
Ikke noe mer relevant informasjon tilgjengelig.
- **Bruk av stoffet/ tilberedning** laboratoriekjemikalier
- **1.3 Enkeltopplysninger om foretaket som leverer sikkerhetsdatabladet**
- **Produsent/leverandør:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Avdeling for nærmere informasjon:** Product safety department
- **1.4 Nødnummer:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## Avsnitt 2: Viktigste faremomenter

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



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.



Miljø

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



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

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

(fortsatt på side 2)

NO

# Sikkerhetsdatablad

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

Trykkdato: 15.05.2015

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**Handelsnavn: Lead Citrate, Trihydrate**

(fortsatt fra side 1)

**· Farepiktogrammer**

GHS07 GHS08 GHS09

**· Signalord Fare****· Advarselsetninger***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.**P281 Bruk påkrevd personlig verneutstyr.**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 hviler i 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: Stoffblandingers sammensetning og stoffenes klassifisering

**· 3.1 Kjemisk karakterisering: Substanser****· 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 symptomer og effekter, både akutt og forsinket** Ikke noe mer relevant informasjon tilgjengelig.

(fortsatt på side 3)



# Sikkerhetsdatablad

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

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- **4.3 Indikasjon på omgående medisinsk hjelp eller påkrevet spesialbehandling**  
Ikke noe mer relevant informasjon tilgjengelig.

### Avsnitt 5: Tiltak ved brannslukning

- **5.1 Slokkemiddel**
- **Egnede slukningsmidler:**  
CO<sub>2</sub>, slukningspulver eller vann i spredt stråle. Større branner bekjempes med vann i spredt stråle eller med skum som er motstandsdyktig mot alkohol.
- **5.2 Spesielle farer som oppstår pga. substanser eller blandinger** Ikke noe mer relevant informasjon tilgjengelig.
- **5.3 Informasjon vedr. brannbekjempelse**
- **Spesielt verneutstyr:** Ta på egnet åndedrettsbeskyttelse.

### Avsnitt 6: Tiltak ved utilsiktet utslipp

- **6.1 Personlige vernetiltak, verneutstyr og prosedyrer ved nødsituasjoner** Ikke nødvendig.
- **6.2 Miljøverntiltak:**  
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 materiale for oppsamling og opprensing:**  
Bortskaff kontaminert matereriale 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 oppbevaring

- **7.1 Forholdsregler 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, inkl. eventuelle inkompatibiliteter**
- **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 Spesiell sluttbruk** Ikke noe mer relevant informasjon tilgjengelig.

### Avsnitt 8: Eksponeringskontroll og personlig verneutstyr

- **Ytterligere informasjon om utforming av tekniske anlegg:** Ingen ytterligere informasjon, se punkt 7.
- **8.1 Kontrollparametere**
- **Komponenter med grenseverdier for arbeidsplass som må overholdes:** Bortfaller.
- **Ytterligere informasjon:** Basis: listene som var gyldige ved oppstillingen.

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# Sikkerhetsdatablad

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

Trykkdato: 15.05.2015

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Handelsnavn: Lead Citrate, Trihydrate

(fortsatt fra side 3)

- **8.2 Begrensning og kontroll av eksponering**
- **Personlig verneutstyr:**
- **Generelle verne- og hygienetiltak:**  
Holdes adskilt fra næringsmidler, drikkevarer og frstoffer.  
Fjern omgende forurensede, gjennomvtede klr.  
Vask hendene fr arbeidspauser og ved arbeidets slutt.  
Beskyttelsesklr m oppbevares adskilt.
- **ndedrettsvern:**  
Ved korttidig eller liten belastning ndredrettsfilterapparat; ved intensiv eller lengre utsetting: bruk omluft-uavhengig ndedrettsbeskyttelsesapparat.
- **Hndvern:**  
Hanskematerialet m vre ugjennomtrengelig og bestandig overfor produktet /stoffet /blandingen.  
P 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 ogs av andre kvalitetskjenner og er forskjellig fra produsent til produsent.
- **gjennomtrengingstid for hanskemateriale**  
Den nyaktige holdbarhetstiden m bringes p det rene hos hanskeprodusenten og overholdes.
- **yevern:** Ikke ndvendig.

## Avsnitt 9: Fysiske og kjemiske egenskaper

- **9.1 Informasjon om grunnleggende fysiske og kjemiske egenskaper**
- **alminnelige opplysninger**
- **Utseende:**

Form:	Fast
Farge:	Ikke bestemt.
- **Lukt:** Karakteristisk
- **Luktterskel:** Ikke bestemt.
- **pH-verdi:** Ikke brukbar.
- **Tilstandsndring**

Smeltepunkt/smelteomrde:	Ikke bestemt.
Kokepunkt/kokeomrde:	Ikke bestemt.
- **Flammepunkt:** Ikke brukbar.
- **Antennelighet (fast, gassformet):** Stoffet er ikke antennelig.
- **Antennelsestemperatur:**
- **Spaltningstemperatur:** Ikke bestemt.
- **Selvantennelighet:** Ikke bestemt.
- **Ekspløsjonsfare:** Produktet er ikke ekspløsjonsfarlig.
- **Ekspløsjonsgrenser:**

Nedre:	Ikke bestemt.
vre	Ikke bestemt.
- **Damptrykk:** Ikke brukbar.
- **Tetthet:** Ikke bestemt.

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# Sikkerhetsdatablad

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

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· <i>relativt tetthet</i>	Ikke bestemt.
· <i>damp tetthet</i>	Ikke brukbar.
· <i>fordampningshastighet</i>	Ikke brukbar.
· <i>Løslighet i / blandbarhet med vann:</i>	Ikke bestemt.
· <i>Fordelingskoeffisient (n-oktanol/vann):</i>	Ikke bestemt.
· <i>Viskositet:</i>	
<i>Dynamisk:</i>	Ikke brukbar.
<i>Kinematisk:</i>	Ikke brukbar.
· <i>9.2 Annen informasjon</i>	Ikke noe mer relevant informasjon tilgjengelig.

### Avsnitt 10: Stabilitet og reaktivitet

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

### Avsnitt 11: Opplysninger om helsefare

- **11.1 Informasjon om toksikologiske virkninger**
- **Akutt toksisitet:**
- **Primær irritasjonsvirkning:**
- **på huden:** Ingen irriterende virkning.
- **på øyet:** Ingen irriterende virkning.
- **Sensibilisering:** Ingen sensibiliserende virkning kjent
- **Informasjon om følgende grupper med potensielle virkninger:**
- **CMR-virkninger (kreftfremkallende virkninger, arvestoffskadelige og reproduksjonsskadelige virkninger)**  
Repr. 1A

### Avsnitt 12: Miljøopplysninger

- **12.1 Giftighet**
- **Akvatisk toksisitet:** Ikke noe mer relevant informasjon tilgjengelig.
- **12.2 Persistens og nedbrytbarhet** Ikke noe mer relevant informasjon tilgjengelig.
- **12.3 Bioakkumulasjonspotensial** 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.  
I vassdrag også giftig for fisker og plankton.  
meget giftig for vannorganismer

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- **12.5 Resultater av PBT- og vPvB-vurdering**
- **PBT:** Ikke brukbar.
- **vPvB:** Ikke brukbar.
- **12.6 Andre skadelige virkninger** Ikke noe mer relevant informasjon tilgjengelig.

### Avsnitt 13: Fjerning av kjemikalieavfall

- **13.1 Metoder for avfallsbehandling**
- **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: Opplysninger om transport

- |   |   |
|---|---|
| · <b>14.1 UN-nummer:</b>                          |   |
| · <b>ADR, IMDG, IATA</b>                          | UN2291  |
| · <b>14.2 Korrekt UN-forsendelsesbetegnelse</b>   |   |
| · <b>ADR</b>                                      | 2291 BLYFORBINDELSE, LØSELIG, N.O.S. (Lead Citrate, Trihydrate), MILJØSKADELG STOFF |
| · <b>IMDG</b>                                     | LEAD COMPOUND, SOLUBLE, N.O.S., MARINE POLLUTANT                                    |
| · <b>IATA</b>                                     | LEAD COMPOUND, SOLUBLE, N.O.S.  |
| · <b>14.3 transport fareklasser</b>               |   |
| · <b>ADR, IMDG</b>                                |   |
|   |   |
|   |   |
| · <b>klasse</b>                                   | 6.1 Giftige stoffer   |
| · <b>Fareseddel</b>                               | 6.1   |
| · <b>IATA</b>                                     |   |
|   |   |
| · <b>Class</b>                                    | 6.1 Giftige stoffer   |
| · <b>Label</b>                                    | 6.1   |
| · <b>14.4 Emballasjegruppe:</b>                   |   |
| · <b>ADR, IMDG, IATA</b>                          | III   |
| · <b>14.5 Miljøfarer:</b>                         | Miljøskadelig stoff, i fast form; Marine Pollutant                                  |
| · <b>Marine pollutant:</b>                        | Ja (P)  |
|   | Symbol (fisk og treet)  |
| · <b>Spesielle merking (ADR):</b>                 | Symbol (fisk og treet)  |
| · <b>14.6 Særskilte forholdsregler for bruker</b> | Advarsel: Giftige stoffer   |
| · <b>Kemler-tall:</b>                             | 60  |

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· <b>EMS-nummer:</b>	F-A,S-A
· <b>Segregation groups</b>	Heavy metals and their salts (including their organometallic compounds), lead and its compounds
· <b>14.7 Transport i bulk iht. annekse II til MARPOL 73/78 og til IBC-koden</b>	Ikke brukbar.
· <b>Transport/ytterligere informasjon:</b>	
· <b>ADR</b>	
· <b>Begrenset mengde (LQ)</b>	5 kg
· <b>Unntatte mengder (EQ)</b>	Kode: E1 Maksimal nettovekt per inneremballasje: 30 g Maksimal nettovekt per ytteremballasje: 1000 g
· <b>Transportkategori</b>	2
· <b>Tunnel restriksjonskode</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5 kg
· <b>Excepted quantities (EQ)</b>	Kode: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· <b>UN "Model Regulation":</b>	UN2291, BLYFORBINDELSE, LØSELIG, N.O.S. (Lead Citrate, Trihydrate), MILJØSKADELG STOFF, 6.1, III

### Avsnitt 15: Opplysninger om lover og forskrifter

- **15.1 Helse-, sikkerhets- og miljøforskrifter/lovgivning som gjelder spesielt for stoffet eller stoffblandingen**  
Ikke noe mer relevant informasjon tilgjengelig.
- **15.2 Kjemisk sikkerhetsvurdering:** En kjemisk sikkerhetsvurdering er ikke utført.

### Avsnitt 16: Andre opplysninger av betydning for helse, miljø og sikkerhet

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 européen sur le transport 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  
P: Marine Pollutant  
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)  
Acute Tox. 4: Acute toxicity, Hazard Category 4  
Repr. 1A: Reproductive toxicity, Hazard Category 1A  
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2  
Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

NO

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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: sgkcck@aol.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**· **Frases 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.*· **Frases de prudência**P260 *Não respirar as poeiras/fumos/gases/névoas/vapores/aerossóis.*P281 *Usar o equipamento de protecção individual exigido.*P301+P312 *EM CASO DE INGESTÃO: caso sinta indisposição, contacte um CENTRO DE INFORMAÇÃO ANTIVENENOS/médico.*P304+P340 *EM CASO DE INALAÇÃO: retirar a vítima para uma zona ao ar livre e mantê-la em repouso 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: 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.

### SECCÃO 5: Medidas de combate a incêndios

- **5.1 Meios de extinção**
- **Meios adequados de extinção:**  
CO<sub>2</sub>, pó extintor ou jacto de água. Um incêndio de grandes dimensões deve ser combatido com jacto de água ou espuma resistente ao álcool.
- **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.

### SECCÃO 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.

### SECCÃO 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 Utilizações finais específicas** Não existe mais nenhuma informação relevante disponível.

### SECCÃO 8: Controlo da exposição/protecção individual

- **Indicações adicionais para concepção de instalações técnicas:** Não existem outras informações, ver ponto 7.
- **8.1 Parâmetros de controlo**
- **Componentes cujo valor do limite de exposição no local de trabalho deve ser monitorizado:** Não aplicável.

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- **Indicações adicionais:** Foram utilizadas como base as listas válidas à data da elaboração.
- **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 físicas e químicas

- **9.1 Informações sobre propriedades físicas e químicas de base**
- **Informações gerais**
- **Aspecto:**

<b>Forma:</b>	Sólido
<b>Cor:</b>	Não classificado.
- **Odor:** Característico
- **Limiar olfactivo:** Não classificado.
- **valor pH:** Não aplicável.
- **Mudança do estado:**

<b>Ponto / intervalo de fusão:</b>	Não classificado.
<b>Ponto / intervalo de ebulição:</b>	Não classificado.
- **Ponto de inflamação:** Não aplicável.
- **Inflamabilidade (sólido, gás):** A substância não é inflamável.
- **Temperatura de ignição:**

<b>Temperatura de decomposição:</b>	Não classificado.
-------------------------------------	-------------------
- **Auto-inflamabilidade:** Não classificado.
- **Perigos de explosão:** O produto não corre o risco de explosão.
- **Limites de explosão:**

<b>Inferior:</b>	Não classificado.
<b>Superior:</b>	Não classificado.
- **Pressão de vapor:** Não aplicável.

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· <b>Densidade:</b>	<i>Não classificado.</i>
· <b>Densidade relativa</b>	<i>Não classificado.</i>
· <b>Densidade de vapor</b>	<i>Não aplicável.</i>
· <b>Velocidade de evaporação</b>	<i>Não aplicável.</i>
· <b>Solubilidade em / miscibilidade com água:</b>	<i>Não classificado.</i>
· <b>Coefficiente de distribuição (n-octanol/água):</b>	<i>Não classificado.</i>
· <b>Viscosidade:</b>	
· <b>Dinâmico:</b>	<i>Não aplicável.</i>
· <b>Cinemático:</b>	<i>Não aplicável.</i>
· <b>9.2 Outras informações</b>	<i>Não existe mais nenhuma informação relevante disponível.</i>

### SECÇÃO 10: Estabilidade e reactividade

- **10.1 Reactividade**
- **10.2 Estabilidade química**
- **Decomposição térmica / condições a evitar:** *Não existe decomposição se usado de acordo com as especificações.*
- **10.3 Possibilidade de reacções perigosas** *Não se conhecem reacções 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:**
- **Efeito de irritabilidade primário:**
- **sobre a pele:** *Não irritante.*
- **sobre os olhos:** *Nenhum efeito irritante.*
- **sensibilização:** *Não são conhecidos efeitos sensibilizantes.*
- **Efeitos CMR (carcinogenicidade, mutagenicidade e efeitos tóxicos na reprodução)**
- Repr. 1A*

### 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.*
- **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.*

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( continuação da página 5 )

- 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

- |   |  |
|---|--|
| · <b>14.1 N° UN</b>   |  |
| · <b>ADR, IMDG, IATA</b>  | UN2291   |
| · <b>14.2 Designação oficial de transporte da ONU</b>                               |  |
| · <b>ADR</b>  | 2291 COMPOSTO SOLÚVEL DE CHUMBO, N.S.A. (dicitrato de trichumbo), PERIGOSO PARA O AMBIENTE |
| · <b>IMDG</b>   | LEAD COMPOUND, SOLUBLE, N.O.S., MARINE POLLUTANT   |
| · <b>IATA</b>   | LEAD COMPOUND, SOLUBLE, N.O.S.   |
| · <b>14.3 Classes de perigo para efeitos de transporte</b>                          |  |
| · <b>ADR, IMDG</b>  |  |
|  |  |
| · <b>Classe</b>   | 6.1 Matérias tóxicas   |
| · <b>Rótulo</b>   | 6.1  |
| · <b>IATA</b>   |  |
|  |  |
| · <b>Class</b>  | 6.1 Matérias tóxicas   |
| · <b>Label</b>  | 6.1  |
| · <b>14.4 Tipo de embalagem</b>   |  |
| · <b>ADR, IMDG, IATA</b>  | III  |
| · <b>14.5 Perigos para o ambiente:</b>  | Matéria perigosa do ponto de vista do ambiente, sólida;                                    |
| · <b>Poluente das águas:</b>  | Poluente das águas   |
|   | Sim (P)  |
|   | Símbolo convencional (peixes e árvore)   |
| · <b>Marcação especial (ADR):</b>   | Símbolo convencional (peixes e árvore)   |

( continuação na página 7 )

**Ficha de dados de segurança**  
**Em conformidade com 1907/2006/CE, Artigo 31.º**

data da impressão 15.05.2015

Revisão: 15.05.2015

**Nome comercial: dicitrato de trichumbo**

(continuação da página 6)

<ul style="list-style-type: none"> <li>· <b>14.6 Precauções especiais para o utilizador</b></li> <li>· <b>Nº Kemler:</b></li> <li>· <b>Nº EMS:</b></li> <li>· <b>Segregation groups</b></li> </ul>	<p>Atenção: <i>Matérias tóxicas</i></p> <p>60</p> <p>F-A,S-A</p> <p><i>Heavy metals and their salts (including their organometallic compounds), lead and its compounds</i></p>
<ul style="list-style-type: none"> <li>· <b>14.7 Transporte a granel em conformidade com o anexo II da Convenção Marpol 73/78 e o Código IBC Não aplicável.</b></li> </ul>	
<ul style="list-style-type: none"> <li>· <b>Transporte/outras informações:</b></li> </ul>	
<ul style="list-style-type: none"> <li>· <b>ADR</b></li> <li>· <b>Quantidades Limitadas (LQ)</b></li> <li>· <b>Quantidades exceptuadas (EQ)</b></li> </ul>	<p>5 kg</p> <p>Código: E1</p> <p>Quantidade líquida máxima por embalagem interior: 30 g</p> <p>8</p> <p>Quantidade líquida máxima por embalagem exterior: 1000 g</p>
<ul style="list-style-type: none"> <li>· <b>Categoria de transporte</b></li> <li>· <b>Código de restrição em túneis</b></li> </ul>	<p>2</p> <p>E</p>
<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	<p>5 kg</p> <p>Code: E1</p> <p>Maximum net quantity per inner packaging: 30 g</p> <p>Maximum net quantity per outer packaging: 1000 g</p>
<ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>	<p>UN2291, COMPOSTO SOLÚVEL DE CHUMBO, N.S.A. (dicitrato de trichumbo), PERIGOSO PARA O AMBIENTE, 6.1, III</p>

### SECÇÃO 15: Informação sobre regulamentação

- **15.1 Regulamentação/legislação específica para a substância ou mistura em matéria de saúde, segurança e ambiente**  
 Não existe mais nenhuma informação relevante disponível.
- **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 européen sur le transport 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

P: Marine Pollutant

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)

Acute Tox. 4: Acute toxicity, Hazard Category 4

Repr. 1A: Reproductive toxicity, Hazard Category 1A

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 15.05.2015

Revisión: 15.05.2015

### 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: sgkcck@aol.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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# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

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Revisión: 15.05.2015

Nombre comercial: dicitrato de triplomo

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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.  
 P281      Utilizar el equipo de protección individual obligatorio.  
 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 víctima al exterior y mantenerla en reposo en una posición confortable para respirar.  
 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

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# Ficha de datos de seguridad

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Nombre comercial: *dicitrato de triplomo*

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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:

CO<sub>2</sub>, polvo extintor o chorro de agua rociada. Combatir incendios mayores con chorro de agua rociada o espuma resistente al alcohol.

#### · 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.

( se continua en página 4 )

# Ficha de datos de seguridad

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- **Normas en caso de un almacenamiento conjunto:** No es necesario.
- **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

- **Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**  
Sin datos adicionales, ver punto 7.
- **8.1 Parámetros de control**
- **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 / substancia / 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 /campo de fusión:** Indeterminado.
- **Punto de ebullición /campo de ebullición:** Indeterminado.

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# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

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· <b>Punto de inflamación:</b>	<i>No aplicable.</i>
· <b>Inflamabilidad (sólido, gaseiforme):</b>	<i>La sustancia no es inflamable.</i>
· <b>Temperatura de ignición:</b>	
<b>Temperatura de descomposición:</b>	<i>No determinado.</i>
· <b>Autoinflamabilidad:</b>	<i>No determinado.</i>
· <b>Peligro de explosión:</b>	<i>El producto no es explosivo.</i>
· <b>Límites de explosión:</b>	
<b>Inferior:</b>	<i>No determinado.</i>
<b>Superior:</b>	<i>No determinado.</i>
· <b>Presión de vapor:</b>	<i>No aplicable.</i>
· <b>Densidad:</b>	<i>Indeterminado.</i>
· <b>Densidad relativa</b>	<i>No determinado.</i>
· <b>Densidad de vapor</b>	<i>No aplicable.</i>
· <b>Velocidad de evaporación</b>	<i>No aplicable.</i>
· <b>Solubilidad en / miscibilidad con agua:</b>	<i>No determinado.</i>
· <b>Coeficiente de reparto (n-octanol/agua):</b>	<i>No determinado.</i>
· <b>Viscosidad:</b>	
<b>Dinámica:</b>	<i>No aplicable.</i>
<b>Cinemática:</b>	<i>No aplicable.</i>
· <b>9.2 Información adicional</b>	<i>No existen más datos relevantes disponibles.</i>

### SECCIÓN 10: Estabilidad y reactividad

- **10.1 Reactividad**
- **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:**
- **Efecto estimulante primario:**
- **en la piel:** *No produce irritaciones.*
- **en el ojo:** *No produce irritaciones.*
- **Sensibilización:** *No se conoce ningún efecto sensibilizante.*
- **Efectos CMR (carcinogenicidad, mutagenicidad y toxicidad para la reproducción)**
- Repr. 1A*

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# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

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Revisión: 15.05.2015

Nombre comercial: dicitrato de triplomo

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### 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 (autoclasificación): 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 UN**
- **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., MARINE POLLUTANT
- **IATA** LEAD COMPOUND, SOLUBLE, N.O.S.
- **14.3 Clase(s) de peligro para el transporte**
- **ADR, IMDG**
- 
- **Clase** 6.1 Materias tóxicas

( se continua en página 7 )

# Ficha de datos de seguridad


## según 1907/2006/CE, Artículo 31

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· <b>Etiqueta</b>	6.1
· <b>IATA</b>	
	
· <b>Class</b>	6.1 Materias tóxicas
· <b>Label</b>	6.1
· <b>14.4 Grupo de embalaje</b>	
· <b>ADR, IMDG, IATA</b>	III
· <b>14.5 Peligros para el medio ambiente:</b>	Sustancia sólida potencialmente peligrosas para el medio ambiente; Contaminante marino
· <b>Contaminante marino:</b>	Sí (P) Símbolo (pez y árbol)
· <b>Marcado especial (ADR):</b>	Símbolo (pez y árbol)
· <b>14.6 Precauciones particulares para los usuarios</b>	Atención: Materias tóxicas
· <b>Número Kemler:</b>	60
· <b>Número EMS:</b>	F-A,S-A
· <b>Segregation groups</b>	Heavy metals and their salts (including their organometallic compounds), lead and its compounds
· <b>14.7 Transporte a granel con arreglo al anexo II del Convenio Marpol 73/78 y del Código IBC</b>	No aplicable.
· <b>Transporte/datos adicionales:</b>	
· <b>ADR</b>	
· <b>Cantidades limitadas (LQ)</b>	5 kg
· <b>Cantidades exceptuadas (EQ)</b>	Código: E1 Cantidad neta máxima por envase interior: 30 g Cantidad neta máxima por embalaje exterior: 1000 g
· <b>Categoría de transporte</b>	2
· <b>Código de restricción del túnel</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5 kg
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· <b>"Reglamentación Modelo" de la UNECE:</b>	UN2291, COMPUESTO DE PLOMO, SOLUBLE, N.E.P. (dicitrato de triplomo), PELIGROSO PARA EL MEDIO AMBIENTE, 6.1, III

### SECCIÓN 15: Información reglamentaria

· **15.1 Reglamentación y legislación en materia de seguridad, salud y medio ambiente específicas para la sustancia o la mezcla**

No existen más datos relevantes disponibles.

· **15.2 Evaluación de la seguridad química:** Una evaluación de la seguridad química no se ha llevado a cabo.

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( se continua en página 8 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 15.05.2015

Revisión: 15.05.2015

**Nombre comercial: dicitrato de triplomo**

( se continua en página 7 )

### 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 européen sur le transport 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

P: Marine Pollutant

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)

Acute Tox. 4: Acute toxicity, Hazard Category 4

Repr. 1A: Reproductive toxicity, Hazard Category 1A

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

ES

# แผ่นข้อมูลความปลอดภัย

## ตาม 1907/2006/EC, มาตรา 31

วันที่พิมพ์ 2015.05.15

การปรับปรุงใหม่ : 2015.05.15

### 1: การระบุสาร/ การทำ/ และของบริษัท / บริษัทที่เข้าถือครอง

- 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 สารหรือสารผสมที่เกี่ยวข้องที่ระบุให้ใช้และไม่ควรให้ใช้ 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: sgkcck@aol.com  
www.emsdiasum.com
- ข้อมูลรายละเอียดเพิ่มเติมหาได้จาก Product safety department
- 1.4 หมายเลขโทรศัพท์ฉุกเฉิน:  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2: การระบุสิ่งที่อันตราย

- 2.1 การจำแนกประเภทของสารหรือสารผสม
- การแบ่งประเภทตามข้อบังคับ (จีซี) 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 มีพิษมากต่อสิ่งมีชีวิตในน้ำพร้อมผลกระทบต่อระยะยาว



Acute Tox. 4                H302 เป็นอันตรายหากกลืนเข้าไป  
Acute Tox. 4                H332 ให้โทษหากสูดหายใจเข้า

- 2.2 องค์ประกอบของฉลาก
- ฉลากตามระเบียบ (EC) เลขที่ 1272/2008 สารได้รับการจัดประเภทและติดฉลากตามข้อบังคับของ CLP

(ต่อที่หน้า 2)

TH

# แผ่นข้อมูลความปลอดภัย

## ตาม 1907/2006/EC, มาตรา 31

วันที่พิมพ์ 2015.05.15

การปรับปรุงใหม่ : 2015.05.15

### ชื่อทางการค้า Lead Citrate, Trihydrate

(ต่อที่หน้า 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

#### · ประกาศการป้องกันระดับระงับภัย

P260 หลีกเลี่ยงการสูดดมไอ/ฝุ่น/ไอสาร/แก๊ส/หมอก/ไอ/ละออง/พ่น

P281 ใช้อุปกรณ์เพื่อป้องกันภัยส่วนบุคคลตามที่กำหนดไว้

P301+P312 หากกลืนลงไป: โทรสู่แพทย์ถึงศูนย์พิษวิทยา/แพทย์ หากท่านรู้สึกไม่สบาย

P304+P340 หากสูดดมไอระเหย: ย้ายไปสู่ที่มีอากาศบริสุทธิ์และพักผ่อนในที่ที่สบายต่อการหายใจ

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: ส่วนประกอบ/ ข้อมูลรายละเอียดของส่วนผสมต่างๆ

#### · 3.1 คุณลักษณะทางเคมี: สาร

#### · การระบุเลขที่ CAS

512-26-5 Lead Citrate, Trihydrate

#### · เลขที่ที่ระบุ

· จำนวน EC: 208-141-1

· เลขที่ EU: 082-001-00-6

### 4: มาตรการการปฐมพยาบาลเบื้องต้น

#### · 4.1 คำอธิบายถึงมาตรการปฐมพยาบาล

#### · ข้อมูลรายละเอียดทั่วไป

อาการจากพิษอาจเกิดขึ้นหลังจากนั้นหลายชั่วโมงดังนั้นจะต้องเฝ้าติดตามอาการทางการแพทย์  
อย่างน้อย 48 ชั่วโมงหลังจากอุบัติเหตุ

#### · หลังจากการสูดดมไอระเหยเข้าไป

หาบริเวณที่มีอากาศบริสุทธิ์หากจำเป็นให้ใช้เครื่องช่วยหายใจให้คนไข้อย่างน้อยปรึกษาแพทย์  
หากอาการยังไม่บรรเทา

ในกรณีที่คนไข้ไม่รู้สึกรู้ตัวให้ขนย้ายคนไข้อย่างมั่นคงในท่าตะแคงด้านข้าง

#### · หลังจากการสัมผัสผิวหนัง

โดยทั่วไปไปผลิตภัณฑ์ที่ไม่ก่อความระคายเคืองต่อผิวหนัง

#### · หลังจากการสัมผัสดวงตา

ชะตาที่เปิดอยู่ใต้อาบน้ำที่กำลัังไหลเป็นเวลาหลายนาที

#### · หลังจากการกลืนเข้าไป

พบแพทย์โดยทันที

#### · 4.2 อาการสำคัญส่วนใหญ่และผลกระทบ ทั้งชนิดเฉียบพลันและค่อยๆ แสดงอาการ

ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

(ต่อที่หน้า 3)

-TH-

# แผ่นข้อมูลความปลอดภัย

## ตาม 1907/2006/EC, มาตรา 31

วันที่พิมพ์ 2015.05.15

การปรับปรุงใหม่ : 2015.05.15

### ชื่อทางการค้า Lead Citrate, Trihydrate

- 4.3 ขอบ่งชี้ของอาการที่ต้องเข้ารับการรักษาจากแพทย์ทันทีและการบำบัดพิเศษที่จำเป็น ไม่มีข้อมูลที่เกี่ยวข้องของนอกเหนือจากนี้

(ต่อที่หน้า 2)

### 5: มาตรการการดับเพลิง

- 5.1 สารที่ใช้ดับเพลิง
- สารดับเพลิงที่เหมาะสม  
คาร์บอนไดออกไซด์สเปรย์ผงหรือน้ำดับเพลิงขนาดใหญ่ด้วยการฉีดน้ำหรือโฟมแอลกอฮอล์ที่ทนทาน
- 5.2 อันตรายเฉพาะอย่างที่เกิดจากสารหรือส่วนผสม ไม่มีข้อมูลที่เกี่ยวข้องของนอกเหนือจากนี้
- 5.3 คำแนะนำสำหรับพนักงานดับเพลิง
- อุปกรณ์ป้องกันภัย อุปกรณ์ป้องกันซึ่งเหมาะสำหรับการหายใจทางปาก

### 6: มาตรการลดอุบัติเหตุ

- 6.1 การป้องกันส่วนบุคคล อุปกรณ์ป้องกัน และขั้นตอนดำเนินการเมื่อเกิดกรณีฉุกเฉิน ไม่ได้กำหนด
- 6.2 การให้ความคุ้มครองสิ่งแวดล้อมล่วงหน้า:  
แจ้งผู้มีอำนาจที่เกี่ยวข้องของในกรณีที่เกิดการไหลซึมเข้าสู่น้ำหรือระบบระบายน้ำ  
อย่าปล่อยให้เขาไปในท่อน้ำทิ้ง/ น้ำบนดินหรือใต้ดิน
- 6.3 วิธีดำเนินการและวัสดุสำหรับการบรรจุและการทำความสะอาด:  
ทิ้งวัสดุที่ปนเปื้อนเป็นของเสียตามรายการในบัญชี 13  
ตรวจให้แน่ใจว่ามีสารระคายเคืองที่ดีพอ
- 6.4 การอ้างอิงถึงส่วนอื่น  
ดูข้อมูลรายละเอียดเรื่องความปลอดภัยในการขนถ่ายจากส่วนที่ 7  
ดูข้อมูลรายละเอียดเรื่องอุปกรณ์ป้องกันส่วนบุคคลจากส่วนที่ 8  
ดูข้อมูลรายละเอียดเรื่องการกำจัดจากส่วนที่ 13

### 7: การขนถ่ายและการจัดเก็บ

- 7.1 การป้องกันล่วงหน้าสำหรับการจัดการด้านความปลอดภัย  
กำจัดฝุ่นให้หมด  
ทำให้แน่ใจว่าสถานที่ทำงานมีการระบายอากาศ/ ไอเสียที่ดี  
เปิดและถือภาชนะรองรับอย่างระมัดระวัง
- ข้อมูลรายละเอียดเกี่ยวกับการป้องกันอัคคีภัยและการระเบิด  
เก็บอุปกรณ์ป้องกันสำหรับการช่วยหายใจให้มีพร้อมใช้งาน
- 7.2 เงื่อนไขในการเก็บรักษาอย่างปลอดภัย, รวมถึงสิ่งที่เข้ากันไม่ได้ใดๆ
- การจัดเก็บ
- ข้อกำหนดที่ต้องปฏิบัติตามสำหรับห้องเก็บและภาชนะบรรจุ ไม่มีข้อกำหนดพิเศษ
- ข้อมูลรายละเอียดด้านการจัดเก็บในสถานที่จัดเก็บรวม ไม่ได้กำหนด
- ข้อมูลรายละเอียดเพิ่มเติมด้านสภาพการจัดเก็บ เก็บโดยปิดฝาปิดอย่างแน่นหนา
- 7.3 การระบุถึงการสิ้นสุดการใช้ ไม่มีข้อมูลที่เกี่ยวข้องของนอกเหนือจากนี้

### 8: การควบคุมการทิ้งในลักษณะเปิด / การป้องกันภัยสำหรับบุคคล

- ข้อมูลรายละเอียดเสริมสำหรับการออกแบบสิ่งอำนวยความสะดวกทางเทคนิค ไม่มีข้อมูลนอกเหนือจากนี้ดูรายการ 7
- 8.1 การควบคุมตัวแปร
- ส่วนผสมพร้อมค่าขอบเขตที่ต้องเฝ้าดูในสถานที่ปฏิบัติงาน ไม่ได้กำหนด
- ข้อมูลรายละเอียดเสริม รายการถูกต้องระหว่างที่จัดทำโดยอาศัยการใช้งานเป็นหลัก

(ต่อที่หน้า 4)

# แผ่นข้อมูลความปลอดภัย

## ตาม 1907/2006/EC, มาตรา 31

วันที่พิมพ์ 2015.05.15

การปรับปรุงใหม่ : 2015.05.15

### ชื่อทางการค้า Lead Citrate, Trihydrate

(ต่อที่หน้า 3)

- 8.2 การควบคุมการสัมผัส
- อุปกรณ์ป้องกันภัยส่วนบุคคล
- มาตรการการป้องกันและสุขอนามัยทั่วไป
  - เก็บให้ห่างจากสิ่งของที่เป็นอาหารเครื่องดื่มและอาหารสัตว์
  - หลีกเลี่ยงเสื้อผ้าที่เปื้อนและเจือปนออกทันที
  - ล้างมือก่อนที่จะหยุดพักและเมื่อสิ้นสุดเวลาทำงาน
  - เก็บชุดป้องกันแยกต่างหาก
- การป้องกันการสูดหายใจเข้าไป
  - ในกรณีที่อยู่เป็นเวลาสั้นหรืออากาศเป็นพิษระดับต่ำใช้หน้ากากกรองเพื่อช่วยหายใจในกรณีที่มีความเข้มข้นสูงหรืออยู่เป็นเวลานานให้ใช้เครื่องป้องกันที่มีอุปกรณ์ช่วยหายใจในตัว
- การป้องกันมือ
  - วัสดุของถุงมือจะต้องไม่ให้อากาศผ่านเข้าออกและทนทานต่อผลิตภัณฑ์/ สาร/ การผลิต
  - เนื่องจากขาดการทดสอบจึงไม่มีคำแนะนำสำหรับวัสดุที่ใช้ทำถุงมือสำหรับผลิตภัณฑ์ / การผลิต / ของผสมเคมี
  - เลือกวัสดุสำหรับถุงมือโดยพิจารณาจากเวลาที่ใช้ในการซึมผ่านอัตราการแพร่และการเสื่อม
- วัสดุที่ใช้ทำถุงมือ
  - การเลือกใช้ถุงมือที่เหมาะสมไม่เพียงแต่ขึ้นอยู่กับวัสดุแต่ยังขึ้นกับมาตรฐานด้านคุณภาพและขอแตกต่างระหว่างผู้ผลิตแต่ละแห่ง
- เวลาที่ใช้ในการทะลุผ่านวัสดุที่ใช้ทำถุงมือ
  - ผู้ผลิตถุงมือป้องกันจะต้องทดสอบหาเวลาแน่นอนที่ใช้ในการทะลุผ่านและจะต้องมีการตรวจสอบติดตาม
- การป้องกันตา ไม่ได้กำหนด

## 9: คุณสมบัติทางกายภาพและเคมี

### · 9.1 ข้อมูลคุณสมบัติพื้นฐานทางกายภาพและเคมี

#### · ข้อมูลรายละเอียดทั่วไป

#### · ลักษณะ :

รูปสีฐาน

ของแข็ง

สี

ไม่ได้กำหนดไว้.

#### · กลิ่น

ลักษณะพิเศษ

#### · เกณฑ์กลิ่น :

ไม่ได้กำหนดไว้.

#### · ค่า pH

ไม่สามารถใช้ได้

#### · การเปลี่ยนสถานะ

จุดหลอมเหลว/ ขอบเขตการหลอมละลาย

ไม่ได้กำหนด

จุดเดือด/ ขอบเขตการเดือด

ไม่ได้กำหนด

#### · จุดวาบไฟ

ไม่สามารถใช้ได้

#### · ความสามารถติดไฟ (ของแข็งแกส)

ผลิตภัณฑ์ไม่ไวไฟ

#### · อุณหภูมิจุดระเบิด

อุณหภูมิละลายตัว

ไม่ได้กำหนดไว้.

#### · การเผาไหม้ด้วยตัวเอง

ไม่ได้กำหนดไว้.

#### · อันตรายจากการระเบิด

ผลิตภัณฑ์ไม่ได้มีอันตรายจากการระเบิด

#### · ขอบเขตการระเบิด

ขั้นต่ำ

ไม่ได้กำหนดไว้.

ขั้นสูง

ไม่ได้กำหนดไว้.

(ต่อที่หน้า 5)

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# แผ่นข้อมูลความปลอดภัย

## ตาม 1907/2006/EC, มาตรา 31

วันที่พิมพ์ 2015.05.15

การปรับปรุงใหม่ : 2015.05.15

### ชื่อทางการค้า Lead Citrate, Trihydrate

(ต่อที่หน้า 4)

· ความดันไอ	ไม่สามารถใช้ได้
· ความหนาแน่น	ไม่ได้กำหนด
· ความหนาแน่นสัมพัทธ์	ไม่ได้กำหนดไว้
· ความหนาแน่นของไอ	ไม่สามารถใช้ได้
· อัตราการระเหย	ไม่สามารถใช้ได้
· ความสามารถในการละลายใน / ความสามารถผสมเป็นสารละลายเนื้อเดียวทุกส่วนผสมกับน้ำ	ไม่ได้กำหนดไว้
· สัมประสิทธิ์การแยกตัว (เฮน-ออกทานอล/น้ำ)	ไม่ได้กำหนดไว้
· ความหนืด (ไดนามิค) พลศาสตร์ (คีนเมติก) จลนศาสตร์	ไม่สามารถใช้ได้
· 9.2 ข้อมูลอื่นๆ	ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

### 10: ความเสถียรและความสามารถในการทำปฏิกิริยา

- 10.1 ปฏิกิริยาโต้ตอบ
- 10.2 เสถียรภาพทางเคมี
- การสลายตัวด้วยความร้อน / เจือจางที่ต้องหลีกเลี่ยง ไม่มีการสลายตัวถ้าใช้ตามรายละเอียดที่ระบุไว้
- 10.3 ความเป็นไปได้อันตรายของการเกิดปฏิกิริยาอันตรายเป็นอันตรายที่รู้จัก
- 10.4 เจือจางเพื่อหลีกเลี่ยงความเสี่ยง ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 10.5 วัสดุที่เข้ากันไม่ได้: ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 10.6 อันตรายจากการสลายตัวของผลิตภัณฑ์: ไม่มีสารจากการสลายตัวที่เป็นอันตรายที่รู้จัก

### 11: ข้อมูลรายละเอียดเกี่ยวกับพิษวิทยา

- 11.1 ข้อมูลเกี่ยวกับผลกระทบทางพิษวิทยา
- ความเป็นพิษอย่างสูดสูด:
- อาการระคายเคืองเบื้องต้น
- บวมผิวหนัง ไม่มีผลทำให้ระคายเคือง
- ที่ดวงตา ไม่ทำให้ระคายเคือง
- การทำให้แพ้ ไม่มีรายงานเรื่องการแพ้
- ผลกระทบ CMR (การทำให้เกิดมะเร็งการผ่าเหล่าและพิษต่อการสืบพันธุ์)  
Repr. 1A

### 12: ข้อมูลรายละเอียดเกี่ยวกับนิเวศวิทยา

- 12.1 ความเป็นพิษ
- ความเป็นพิษที่เกี่ยวข้องกับน้ำ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 12.2 การคงอยู่และการย่อยสลาย ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 12.3 การสะสมทางชีวภาพที่อาจเกิดขึ้น ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 12.4 การเปลี่ยนแปลงในดิน ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- ผลกระทบด้านพิษต่อระบบนิเวศ
- ขอสั่งเกต เป็นพิษมากสำหรับปลา

(ต่อที่หน้า 6)

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# แผ่นข้อมูลความปลอดภัย

## ตาม 1907/2006/EC, มาตรา 31

วันที่พิมพ์ 2015.05.15

การปรับปรุงใหม่ : 2015.05.15

### ชื่อทางการค้า Lead Citrate, Trihydrate

(ต่อที่หน้า 5)

#### · ข้อมูลรายละเอียดเสริมเกี่ยวกับนิเวศวิทยา

#### · หมายเหตุทั่วไป

เป็นอันตรายต่อน้ำชั้น 3 ( กฎข้อบังคับของเยอรมัน ) ( การประเมินค่าด้วยตัวเอง ) : เป็นอันตรายสูงสุดกับน้ำ

อย่าปล่อยให้ผลิตภัณฑ์ไปถึงน้ำผิวดินเส้นทางน้ำหรือระบบระบายน้ำเสียแม้ว่าจะเป็นปริมาณเล็กน้อยเท่านั้น

เป็นอันตรายต่อน้ำดื่มแม้จะร่วงลงในพื้นที่ดินเป็นปริมาณที่น้อยมากก็ตาม

เป็นพิษกับปลาและแพลงคตอนในผิวน้ำ

มีพิษมากต่อสิ่งมีชีวิตในน้ำ

#### · 12.5 ผลของ PBT และการประเมิน vPvB

· PBT: ไม่สามารถใช้ได้

· vPvB: ไม่สามารถใช้ได้

· 12.6 ผลข้างเคียงอื่นๆ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

### 13: การพิจารณาการกำจัด

#### · 13.1 วิธีการกำจัดของเสีย

· คำแนะนำ ต้องไม่ทิ้งไปพร้อมกับขยะจากบ้านเรือนอย่าปล่อยให้ผลิตภัณฑ์เข้าถึงระบบระบายน้ำเสีย

· ภาชนะบรรจุที่ยังไม่ได้ล้างทำความสะอาด

· คำแนะนำ การกำจัดจะต้องทำตามกฎระเบียบที่เป็นทางการ

### 14: ข้อมูลรายละเอียดในการขนส่ง

#### · 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., MARINE POLLUTANT

· IATA LEAD COMPOUND, SOLUBLE, N.O.S.

#### · 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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# แผ่นข้อมูลความปลอดภัย

## ตาม 1907/2006/EC, มาตรา 31

วันที่พิมพ์ 2015.05.15

การปรับปรุงใหม่ : 2015.05.15

### ชื่อทางการค้า Lead Citrate, Trihydrate

(ต่อที่หน้า 6)

<ul style="list-style-type: none"> <li>14.4 กลุ่มของภาชนะบรรจุ</li> <li>ADR, IMDG, IATA</li> </ul>	III
<ul style="list-style-type: none"> <li>14.5 สิ่งที่เป็นอันตรายต่อสภาพแวดล้อม</li> <li>สารที่เป็นพิษต่อทะเล</li> <li>เฉพาะการติดฉลาก (ADR):</li> </ul>	วัสดุเป็นอันตรายต่อสภาพแวดล้อม; Marine Pollutant ไซ (P) สัญลักษณ์ (ปลาและต้นไม้) สัญลักษณ์ (ปลาและต้นไม้)
<ul style="list-style-type: none"> <li>14.6 การป้องกันพิเศษล่วงหน้าสำหรับผู้ใช้</li> <li>รหัสความอันตราย:</li> <li>หมายเลข EMS</li> <li>Segregation groups</li> </ul>	ค่าเตือน !: สารมีพิษ 60 F-A,S-A Heavy metals and their salts (including their organometallic compounds), lead and its compounds
<ul style="list-style-type: none"> <li>14.7 การขนส่งขนาดใหญ่ตามภาคผนวก 2 ของ MARPOL73/78 และรหัส IBC</li> </ul>	ไม่สามารถใช้ได้
<ul style="list-style-type: none"> <li>การขนส่ง/ข้อมูลรายละเอียดเสริม</li> </ul>	
<ul style="list-style-type: none"> <li>ADR</li> <li>ปริมาณที่จำกัด (LQ)</li> <li>Excepted quantities (EQ)</li> <li>หมวดหมู่การขนส่ง</li> <li>รหัสควบคุมการผ่านอุโมงค์</li> </ul>	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"> <li>IMDG</li> <li>Limited quantities (LQ)</li> <li>Excepted quantities (EQ)</li> </ul>	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"> <li>“□□□□□□□□□□□□□□□□” ของ UN</li> </ul>	UN2291, LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS, 6.1, III

### 15: ข้อมูลรายละเอียดของกฎระเบียบ

- 15.1 ความปลอดภัย สุขภาพและระเบียบ/กฎหมายสิ่งแวดล้อมโดยเฉพาะของสารหรือสารผสม  
ไม่มีข้อมูลที่เกี่ยวของนอกเหนือจากนี้
- 15.2 การประเมินความปลอดภัยของสารเคมี: ไม่ได้ดำเนินการตามการประเมินความปลอดภัยของสารเคมี

### 16: ข้อมูลรายละเอียดอื่นๆ

ข้อมูลรายละเอียดนี้ใช้ความรู้ปัจจุบันของเราเป็นหลัก อย่างไรก็ตาม ข้อมูลนี้ไม่ใช่การรับประกันจากสถาบันต่อคุณสมบัติเฉพาะของผลิตภัณฑ์และไม่สามารถยืนยันการบังคับใช้ตามกฎหมายที่เกี่ยวข้องกับสัญญา

#### คำย่อและชื่อย่อที่ผสมขึ้น

ADR: Accord européen sur le transport 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

P: Marine Pollutant

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

(ต่อที่หน้า 8)

แผ่นข้อมูลความปลอดภัย  
ตาม 1907/2006/EC, มาตรา 31

วันที่พิมพ์ 2015.05.15

การปรับปรุงใหม่ : 2015.05.15

**ชื่อทางการค้า Lead Citrate, Trihydrate**

CAS: Chemical Abstracts Service (division of the American Chemical Society)  
Acute Tox. 4: Acute toxicity, Hazard Category 4  
Repr. 1A: Reproductive toxicity, Hazard Category 1A  
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2  
Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

(ต่อที่หน้า 7)

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# Dữ liệu an toàn

## Theo điều 91/155 EEC

Ngày in 2015.05.15

Sửa lại: 2015.05.15




### 1 Nhận biết các chất hoặc hỗn hợp và các doanh nghiệp

- **Phân loại sản phẩm**
- **Tên giao dịch** 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
- **Hướng 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: sgkcck@aol.com  
www.emsdiasum.com
- **Các thông tin chi tiết có thể tìm thấy ở:** Product safety department
- **Số điện thoại khẩn cấp:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 Thành phần / Thông tin của công thức

- **Mô tả tính chất hóa học:** 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

### 3 Xác định các trường hợp nguy hiểm có thể xảy ra

- **Phân loại chất và hỗn hợp**
- **Phân loại theo chỉ thị 67/548/EWG hoặc chỉ thị 1999/45/EG**
  -  T; Độc hại  
Repr. Cat. 1, 3  
R61: Có thể có hại cho thai nhi.
  -  Xn; Có hại  
R62-20/22: Có thể có nguy cơ làm giảm khả năng sinh sản. Có hại nếu hít và nuốt phải.
  -  N; Có hại cho môi trường  
R50/53: Rất độc hại cho sinh vật sống dưới nước, có thể gây tác hại lâu dài đối với môi trường nước.  
R33: Nguy cơ tác dụng tích lũy.
- **Đặc biệt nguy hiểm cho con người và môi trường:** Không áp dụng

(Xem tiếp ở trang 2)

# Dữ liệu an toàn

## Theo điều 91/155 EEC

Ngày in 2015.05.15

Sửa lại: 2015.05.15

### Tên giao dịch Lead Citrate, Trihydrate

(Xem tiếp ở trang 1)

- **Các phần tử nhãn hiệu**
- **Ghi nhãn theo chỉ thị của EWG (Nhóm hoạt động vì môi trường)**  
Sản phẩm đã được đánh dấu theo chỉ thị Châu Âu / Pháp lệnh về vật liệu nguy hại.
- **Chữ số nhận biết và chỉ dẫn nguy hiểm của sản phẩm:**



Repr. Cat. 1, 3  
T Độc hại  
N Có hại cho môi trường

- **Các câu lưu ý về các nguy cơ:**
  - 61 Có thể có hại cho thai nhi.
  - 62 Có thể có nguy cơ làm giảm khả năng sinh sản.
  - 20/22 Cũng có hại nếu hít và nuốt phải.
  - 33 Nguy cơ tác dụng tích lũy.
  - 50/53 Rất độc hại cho sinh vật sống dưới nước, có thể gây tác hại lâu dài đối với môi trường nước.
- **Các câu lưu ý về sự an toàn:**
  - 53 Tránh tiếp xúc – nắm được những chỉ dẫn đặc biệt trước khi sử dụng.
  - 45 Trong trường hợp xảy ra tai nạn hoặc thấy khó chịu, xin chỉ dẫn của bác sĩ ngay lập tức (chỉ ra nhãn mác sản phẩm nếu có thể).
  - 60 Vật liệu này và hộp chứa phải được phân loại vào loại rác độc hại.
  - 61 Tránh thải ra môi trường. Xem các chỉ dẫn đặc biệt/dữ liệu an toàn.
- **Các dấu hiệu nhận biết đặc biệt của mỗi hỗn hợp:**  
Chứa chì. Không nên sử dụng trên bề mặt các vật dụng thường bị trẻ em nhai hoặc hút.

## 4 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

## 5 Các giải pháp chữa cháy

- **Các giải pháp chữa cháy thích hợp**  
CO<sub>2</sub>, bột hay phun bụi nước. Chữa đám cháy lớn hơn phải phun bụi nước hay bột ARC
- **Những nguy cơ gây cháy từ các chất hoặc hỗn hợp** Không có thêm thông tin liên quan
- **Các thiết bị bảo vệ** Mặt nạ phòng độc

## 6 Các biện pháp trong trường hợp giải phóng bất ngờ

- **Các biện pháp phòng ngừa cá nhân, thiết bị bảo hộ và thủ tục khẩn cấp** Không yêu cầu  
(Xem tiếp ở trang 3)

# Dữ liệu an toàn

## Theo điều 91/155 EEC

Ngày in 2015.05.15

Sửa lại: 2015.05.15

### Tên giao dịch Lead Citrate, Trihydrate

(Xem tiếp ở trang 2)

- **Các biện pháp bảo vệ 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
- **Các phương pháp và nguyên liệu dùng cho việc ngăn chặn và làm sạch**  
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 và thiết bị bảo hộ cá nhân  
Xem phần 13 để biết thông tin về xả thải

### 7 Xử lý và lưu trữ

- **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
- **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

### 8 Kiểm soát các tình huống nguy hiểm / Bảo vệ cá nhân

- **Thông tin thêm về thiết kế các phương tiện kỹ thuật** Không có thêm dữ liệu; xem mục 7
- **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
- **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 tập 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 đối 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

(Xem tiếp ở trang 4)

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**Tên giao dịch Lead Citrate, Trihydrate**

· **Bảo vệ mắt Eye** Không yêu cầu

(Xem tiếp ở trang 3)

### 9 Tính chất vật lý và hóa học

· **Thông tin tổng quát**

· **Diện mạo:**

**Hình thức::**

Chất rắn

**Màu:**

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 bay hơi:**

Không thể áp dụng.

· **Tính dễ cháy (rắn, khí):**

Sản phẩm không cháy.

· **Nhiệt độ cháy:**

**Nhiệt độ phân hủy:**

Không xác định.

· **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 lực hơi::**

Không thể áp dụng.

· **Mật độ:**

Không xác định.

· **Mật độ tương đối:**

Không xác định.

· **Mật độ của hơi:**

Không thể áp dụng.

· **Tỉ lệ bay 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

### 10 Sự ổn định và phản ứng:

· **Phân hủy nhiệt / Điều kiện cần tránh::** Không phân hủy nếu được sử dụng theo tiêu chuẩn.

· **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.

VN

(Xem tiếp ở trang 5)



# Dữ liệu an toàn

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Tên giao dịch **Lead Citrate, Trihydrate**

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### 11 Thông tin 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.

### 12 Thông tin sinh thái

- **Thủy sản độc tính:** Không có thêm thông tin liên quan.
- **Sự kiên trì và khả năng nhạ dần:** Không có thêm thông tin liên quan.
- **Tiềm năng tích lũy sinh học** 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. .  
Cũng độc hại cho cá và sinh vật phù du sống trong môi trường nước.  
Rất độc cho các sinh vật sống dưới nước.

### 13 Xem xét xử lý

- **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.

### 14 Thông tin vận chuyển

- |                                       |   |
|---------------------------------------|---|
| · Mã LHQ (UN)                         |   |
| · ADR, IMDG, IATA                     | UN2291  |
| · Tên vận chuyển theo quy ước của LHQ |   |
| · ADR                                 | 2291 LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Citrate, Trihydrate), ENVIRONMENTALLY HAZARDOUS |
| · IMDG                                | LEAD COMPOUND, SOLUBLE, N.O.S., MARINE POLLUTANT  |
| · IATA                                | LEAD COMPOUND, SOLUBLE, N.O.S.  |

(Xem tiếp ở trang 6)

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### Tên giao dịch Lead Citrate, Trihydrate

(Xem tiếp ở trang 5)

- vận chuyển các lớp học nguy hiểm

- ADR, IMDG



- lớp
- nhãn

6.1 Các chất độc.  
6.1

- IATA



- Class
- Label

6.1 Các chất độc.  
6.1

- Nhóm bao bì
- ADR, IMDG, IATA

III

- Các môi trường nguy hiểm:
- Ô nhiễm biển:

Chất độc hại với môi trường, dạng rắn; Ô nhiễm biển  
Có (P)

- Đánh dấu đặc biệt (ADR):

Biểu tượng (cá và cây)  
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:

F-A,S-A

- Các nhóm phân tách

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

- 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 chết 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

VN

(Xem tiếp ở trang 7)

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### 15 Thông tin quy định:

- **Kho hóa chất và chất hóa học của Philippin** Chất không được liệt kê.
- **Kho chất hóa học của Australia** Chất được liệt kê.
- **Lập kế hoạch cho thuốc và chất độc theo mẫu chuẩn** Chất không được liệt kê.
- **Ghi nhãn theo chỉ thị của EU:**  
Sản phẩm đã được đánh dấu theo chỉ thị Châu Âu / Pháp lệnh về vật liệu nguy hại.
- **Chữ và dấu hiệu cảnh báo nguy hiểm của sản phẩm**



Repr. Cat. 1, 3  
T Độc hại  
N Có hại cho môi trường

- **Các cụm từ chỉ rõ rủi ro**
  - 61 Có thể có hại cho thai nhi.
  - 62 Có thể có nguy cơ làm giảm khả năng sinh sản.
  - 20/22 Cũng có hại nếu hít và nuốt phải.
  - 33 Nguy cơ tác dụng tích lũy.
  - 50/53 Rất độc hại cho sinh vật sống dưới nước, có thể gây tác hại lâu dài đối với môi trường nước.
- **Các cụm từ chỉ rõ an toàn**
  - 53 Tránh tiếp xúc – nắm được những chỉ dẫn đặc biệt trước khi sử dụng.
  - 45 Trong trường hợp xảy ra tai nạn hoặc thấy khó chịu, xin chỉ dẫn của bác sĩ ngay lập tức (chỉ ra nhãn mác sản phẩm nếu có thể).
  - 60 Vật liệu này và hộp chứa phải được phân loại vào loại rác độc hại.
  - 61 Tránh thải ra môi trường. Xem các chỉ dẫn đặc biệt/dữ liệu an toàn.
- **Nhãn đặc biệt cho một số chế phẩm**  
Chứa chì. Không nên sử dụng trên bề mặt các vật dụng thường bị trẻ em nhai hoặc hút.

### 16 Thông tin 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.

VN