

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/02/2022

Reviewed on 09/02/2022

## 1 Identification

- **Product identifier**
- **Trade name:** Lead Citrate Ready to use
- **Article number:** 22410, 22410-01
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS07

Skin Irritation 2

H315 Causes skin irritation.

Eye Irritation 2A

H319 Causes serious eye irritation.

Specific Target Organ Toxicity - Single Exposure 3 H335 May cause respiratory irritation.

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



GHS07

- **Signal word** Warning
- **Hazard statements**  
Causes skin irritation.  
Causes serious eye irritation.  
May cause respiratory irritation.
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Wash thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves / eye protection / face protection.  
If on skin: Wash with plenty of water.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.  
Call a poison center/doctor if you feel unwell.  
Specific treatment (see on this label).

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Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**

HEALTH	2	Health = 2
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:** Void

### 4 First-aid measures

· **Description of first aid measures**

· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** If symptoms persist consult doctor.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### 5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

· **Special hazards arising from the substance or mixture** No further relevant information available.

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**Trade name:** *Lead Citrate Ready to use*

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- **Advice for firefighters**
- **Protective equipment:** *No special measures required.*

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** *Not required.*
- **Environmental precautions:**
  - Dilute with plenty of water.*
  - Do not allow to enter sewers/ surface or ground water.*
- **Methods and material for containment and cleaning up:**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).*
  - Ensure adequate ventilation.*
- **Reference to other sections**
  - See Section 7 for information on safe handling.*
  - See Section 8 for information on personal protection equipment.*
  - See Section 13 for disposal information.*
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

7429-91-6	dysprosium	30 mg/m <sup>3</sup>
7440-54-2	gadolinium	30 mg/m <sup>3</sup>

· **PAC-2:**

7429-91-6	dysprosium	330 mg/m <sup>3</sup>
7440-54-2	gadolinium	330 mg/m <sup>3</sup>

· **PAC-3:**

7429-91-6	dysprosium	2,000 mg/m <sup>3</sup>
7440-54-2	gadolinium	2,000 mg/m <sup>3</sup>

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
  - Ensure good ventilation/exhaustion at the workplace.*
  - Prevent formation of aerosols.*
- **Information about protection against explosions and fires:** *No special measures required.*
- **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:**
  - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.*

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· **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.

Avoid contact with the eyes and skin.

· **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:**



Protective gloves

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

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

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

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

· **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form: Liquid

Color: Transparent

· **Odor:** uncharacteristic

· **Odor threshold:** Not determined.

· **pH-value at 20 °C (68 °F):** 7

· **Change in condition**

Melting point/Melting range: 0 °C (32 °F)

Boiling point/Boiling range: 100 °C (212 °F)

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not flammable.

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· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <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 at 20 °C (68 °F):</b>	23 hPa (17.3 mm Hg)
· <b>Density at 20 °C (68 °F):</b>	1 g/cm <sup>3</sup> (8.345 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Water:</b>	97.0 %
<b>VOC content:</b>	0.00 %
	0.0 g/l / 0.00 lb/gal
<b>Solids content:</b>	0.0 %
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

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

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant

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· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety Health Administration)**

None of the ingredients is listed.

### 12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability:** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential:** No further relevant information available.

· **Mobility in soil:** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

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

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects:** No further relevant information available.

### 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

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

· **Uncleaned packagings:**

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

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

### 14 Transport information

· **Environmental hazards:** Not applicable.

· **Special precautions for user:** Not applicable.

· **Segregation groups:** (SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds

· **Stowage Category:** A

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

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· **Transport/Additional information:**

· **ADR**

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **IMDG**

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **UN "Model Regulation":**

Void

## 15 Regulatory information

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

No further relevant information available.

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

7732-18-5	Deionized Water, Reagent Grade A.C.S.	ACTIVE
7429-91-6	dysprosium	ACTIVE
7440-54-2	gadolinium	ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

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· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard statements**

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves / eye protection / face protection.

If on skin: Wash with plenty of water.

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

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Call a poison center/doctor if you feel unwell.

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

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

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

## 16 Other information

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

· **Contact:**

· **Date of preparation / last revision** 09/02/2022 / -

· **Abbreviations and acronyms:**

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

IMDG: International Maritime Code for Dangerous Goods

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3



# Safety Data Sheet

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Revision: 02.09.2022

### 1 Identification

- **Product identifier**
- **Trade name:** Lead Citrate Ready to use
- **Article number:** 22410, 22410-01
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- ProSciTech Pty Ltd  
11 Carlton Street, Kirwan QLD 4817 Australia  
Telephone Number: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)  
Emergency Contact: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)  
Website: [ems.proscitech.com](http://ems.proscitech.com)
- Emgrid Australia Pty. Ltd.  
P.O. Box 118  
The Patch VIC 3792  
Australia  
Tel: 03 9752 1785  
Fax: 03 9752 1784  
Website: [www.emgrid.com.au](http://www.emgrid.com.au)
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 Hazard(s) Identification

- **Classification of the substance or mixture**



GHS07

Skin Irrit. 2      H315 Causes skin irritation.  
 Eye Irritation 2A    H319 Causes serious eye irritation.  
 STOT SE 3      H335 May cause respiratory irritation.

- **Label elements**
- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning

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- **Hazard statements**

- Causes skin irritation.
- Causes serious eye irritation.
- May cause respiratory irritation.

- **Precautionary statements**

- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Wash thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Wear protective gloves / eye protection / face protection.
- **IF ON SKIN:** Wash with plenty of water.
- **IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Call a **POISON CENTER/doctor** if you feel unwell.
- Specific treatment (see on this label).
- Take off contaminated clothing and wash it before reuse.
- If skin irritation occurs: Get medical advice/attention.
- If eye irritation persists: Get medical advice/attention.
- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition and Information on Ingredients

- **Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.
- **Dangerous components:** Void
- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### 4 First Aid Measures

- **Description of first aid measures**
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire Fighting Measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards arising from the substance or mixture** No further relevant information available.

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- **Advice for firefighters**
- **Protective equipment:** *No special measures required.*

### 6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures** *Not required.*
- **Environmental precautions:**
  - Dilute with plenty of water.*
  - Do not allow to enter sewers/ surface or ground water.*
- **Methods and material for containment and cleaning up:**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).*
  - Ensure adequate ventilation.*
- **Reference to other sections**
  - See Section 7 for information on safe handling.*
  - See Section 8 for information on personal protection equipment.*
  - See Section 13 for disposal information.*

### 7 Handling and Storage

- **Handling:**
- **Precautions for safe handling**
  - Ensure good ventilation/exhaustion at the workplace.*
  - Prevent formation of aerosols.*
- **Information about fire - and explosion protection:** *No special measures required.*
- **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 and personal protection

- **Additional information about design of technical facilities:** *No further data; see item 7.*
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
  - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.*
- **Additional information:** *The lists valid during the making were used as basis.*
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  - Keep away from foodstuffs, beverages and feed.*
  - Immediately remove all soiled and contaminated clothing*
  - Wash hands before breaks and at the end of work.*
  - Avoid contact with the eyes and skin.*
- **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.*

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· **Protection of hands:**



Protective gloves

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

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

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

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

· **Eye protection:**



Tightly sealed goggles

## 9 Physical and Chemical Properties

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

· **General Information**

· **Appearance:**

<b>Form:</b>	Liquid
<b>Colour:</b>	Transparent
<b>Odour:</b>	Uncharacteristic.
<b>Odour threshold:</b>	Not determined.

· **pH-value at 20 °C:** 7

· **Change in condition**

<b>Melting point/freezing point:</b>	0 °C
<b>Initial boiling point and boiling range:</b>	100 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Not applicable.

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

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

· **Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

· **Vapour pressure at 20 °C:** 23 hPa

· **Density at 20 °C:** 1 g/cm<sup>3</sup>

· **Relative density** Not determined.

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· <b>Vapour density</b>	<i>Not determined.</i>
· <b>Evaporation rate</b>	<i>Not determined.</i>
· <b>Solubility in / Miscibility with water:</b>	<i>Fully miscible.</i>
· <b>Partition coefficient: n-octanol/water:</b>	<i>Not determined.</i>
· <b>Viscosity:</b>	
<b>Dynamic:</b>	<i>Not determined.</i>
<b>Kinematic:</b>	<i>Not determined.</i>
· <b>Solvent content:</b>	
<b>Water:</b>	<i>97.0 %</i>
<b>VOC (EC)</b>	<i>0.00 %</i>
<b>Solids content:</b>	<i>0.0 %</i>
· <b>Other information</b>	<i>No further relevant information available.</i>

### 10 Stability and Reactivity

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

### 11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** *Irritant to skin and mucous membranes.*
- **Serious eye damage/irritation** *Irritating effect.*
- **Respiratory or skin sensitisation** *No sensitising effects known.*
- **Additional toxicological information:**  
*The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:*  
*Irritant*

### 12 Ecological Information

- **Toxicity**
- **Aquatic toxicity:** *No further relevant information available.*
- **Persistence and degradability** *No further relevant information available.*
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** *No further relevant information available.*
- **Mobility in soil** *No further relevant information available.*

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- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **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.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

<b>· Environmental hazards:</b>	Not applicable.
<b>· Special precautions for user</b>	Not applicable.
<b>· Segregation groups</b>	(SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds
<b>· Stowage Category</b>	A
<b>· Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
<b>· Transport/Additional information:</b>	
<b>· ADG</b>	
<b>· Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<b>· IMDG</b>	
<b>· Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<b>· UN "Model Regulation":</b>	not regulated

### 15 Regulatory information

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

· **Australian Inventory of Industrial Chemicals**

7732-18-5 | Deionized Water, Reagent Grade A.C.S.

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# Safety Data Sheet

## according to WHS Regulations

Printing date 02.09.2022

Revision: 02.09.2022

**Trade name: Lead Citrate Ready to use**

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· **Standard for the Uniform Scheduling of Medicines and Poisons**

None of the ingredients is listed.

· **Australia: Priority Existing Chemicals**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard statements**

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves / eye protection / face protection.

**IF ON SKIN:** Wash with plenty of water.

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

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Call a POISON CENTER/doctor if you feel unwell.

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

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

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

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

## 16 Other information

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

· **Contact:**

· **Abbreviations and acronyms:**

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

IMDG: International Maritime Code for Dangerous Goods

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation – Category 2

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**Safety Data Sheet**  
according to WHS Regulations

Printing date 02.09.2022

Revision: 02.09.2022

**Trade name: Lead Citrate Ready to use**

*Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A*  
*STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*

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AU



# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 09/02/2022

Reviewed on 09/02/2022

### 1 Identification

- **Product identifier**
- **Trade name:** Lead Citrate Ready to use
- **Article number:** 22410, 22410-01
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 Electron Microscopy Sciences  
 1560 Industry Road  
 USA-Hatfield, PA 19440  
 Tel: 215-412-8400 Fax: 215-412-8450  
 email: info@emsdiasum.com  
 www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
 ChemTrec 1-800-424-9300 Contract CCN7661  
 1-703-527-3887

### 2 Hazard identification

- **Classification of the substance or mixture**



GHS07

Skin Irritation - Category 2

H315 Causes skin irritation.

Eye Irritation - Category 2A

H319 Causes serious eye irritation.

Specific Target Organ Toxicity - Single Exposure -  
Category 3

H335 May cause respiratory irritation.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS07

- **Signal word** Warning

- **Hazard statements**

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

- **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

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

If on skin: Wash with plenty of water.

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Call a poison center/doctor if you feel unwell.

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 09/02/2022

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**Trade name: Lead Citrate Ready to use**

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*Specific treatment (see on this label).*

*Take off contaminated clothing and wash it before reuse.*

*If skin irritation occurs: Get medical advice/attention.*

*If eye irritation persists: Get medical advice/attention.*

*Store in a well-ventilated place. Keep container tightly closed.*

*Store locked up.*

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**

HEALTH	2	Health = 2
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

### 3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:** Void

### 4 First-aid measures

· **Description of first aid measures**

· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

*Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.*

· **After swallowing:** If symptoms persist consult doctor.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

*No further relevant information available.*

### 5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

· **Special hazards arising from the substance or mixture** No further relevant information available.

· **Advice for firefighters**

· **Protective equipment:** No special measures required.

### 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Not required.

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 09/02/2022

Reviewed on 09/02/2022

**Trade name: Lead Citrate Ready to use**

(Contd. of page 2)

- **Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **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:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **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.  
Avoid contact with the eyes and skin.
- **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:**



Protective gloves

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

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 09/02/2022

Reviewed on 09/02/2022

**Trade name: Lead Citrate Ready to use**

(Contd. of page 3)

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

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

· **Eye protection:**



Tightly sealed goggles

### 9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	Transparent
<b>Odor:</b>	uncharacteristic
<b>Odor threshold:</b>	Not determined.

· **pH-value at 20 °C:** 7

· **Change in condition**

<b>Melting point/Melting range:</b>	0 °C
<b>Boiling point/Boiling range:</b>	100 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not flammable.

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

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

· **Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

· **Vapor pressure at 20 °C:** 23 hPa

<b>Density at 20 °C:</b>	1 g/cm <sup>3</sup>
<b>Relative density</b>	Not determined.
<b>Vapor density</b>	Not determined.
<b>Evaporation rate</b>	Not determined.

· **Solubility in / Miscibility with**

**Water:** Fully miscible.

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

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CA

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 09/02/2022

Reviewed on 09/02/2022

Trade name: *Lead Citrate Ready to use*

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· <b>Viscosity:</b>	
<b>Dynamic:</b>	<i>Not determined.</i>
<b>Kinematic:</b>	<i>Not determined.</i>
· <b>Solvent content:</b>	
<b>Water:</b>	<i>97.0 %</i>
<b>Solids content:</b>	<i>0.0 %</i>
· <b>Other information</b>	<i>No further relevant information available.</i>

### 10 Stability and reactivity

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

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** *Irritant to skin and mucous membranes.*
- **on the eye:** *Irritating effect.*
- **Sensitization:** *No sensitizing effects known.*
- **Additional toxicological information:**  
*The product shows the following dangers according to internally approved calculation methods for preparations:*  
*Irritant*
- **Carcinogenic categories**

#### · **IARC (International Agency for Research on Cancer)**

*None of the ingredients is listed.*

#### · **NTP (National Toxicology Program)**

*None of the ingredients is listed.*

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** *No further relevant information available.*
- **Persistence and degradability** *No further relevant information available.*
- **Behavior in environmental systems:**
- **Bioaccumulative potential** *No further relevant information available.*
- **Mobility in soil** *No further relevant information available.*
- **Additional ecological information:**
- **General notes:**  
*Water hazard class 1 (Self-assessment): slightly hazardous for water*  
*Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.*

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 09/02/2022

Reviewed on 09/02/2022

Trade name: *Lead Citrate Ready to use*

(Contd. of page 5)

- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

- |  |  |
|--|--|
| · <b>Environmental hazards:</b>  | Not applicable.  |
| · <b>Special precautions for user</b>  | Not applicable.  |
| · <b>Segregation groups</b>  | (SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds    |
| · <b>Stowage Category</b>  | A  |
| · <b>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>Excepted quantities (EQ)</b>  | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>IMDG</b>  |  |
| · <b>Excepted quantities (EQ)</b>  | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>UN "Model Regulation":</b>  | Void   |

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

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ACTIVE

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CA

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 09/02/2022

Reviewed on 09/02/2022

Trade name: **Lead Citrate Ready to use**

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7429-91-6	dysprosium	ACTIVE
7440-54-2	gadolinium	ACTIVE

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

7732-18-5	Deionized Water, Reagent Grade A.C.S.
-----------	---------------------------------------

· **Canadian Non-Domestic Substances List (NDSL)**

7429-91-6	dysprosium
7440-54-2	gadolinium

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

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

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard statements**

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

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

If on skin: Wash with plenty of water.

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Call a poison center/doctor if you feel unwell.

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

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

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

### 16 Other information

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

· **Contact:**

· **Date of the latest revision of the safety data sheet** 09/02/2022 / -

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CA

**Safety Data Sheet**  
according to HPR, Schedule 1

Printing date 09/02/2022

Reviewed on 09/02/2022

**Trade name: Lead Citrate Ready to use**

(Contd. of page 7)

**· Abbreviations and acronyms:**

*IMDG: International Maritime Code for Dangerous Goods*  
*EINECS: European Inventory of Existing Commercial Chemical Substances*  
*ELINCS: European List of Notified Chemical Substances*  
*CAS: Chemical Abstracts Service (division of the American Chemical Society)*  
*NFPA: National Fire Protection Association (USA)*  
*HMIS: Hazardous Materials Identification System (USA)*  
*PBT: Persistent, Bioaccumulative and Toxic*  
*vPvB: very Persistent and very Bioaccumulative*

CA



# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.09.2022

Revision: 02.09.2022

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

- **Product identifier**
- **Trade name:** Lead Citrate Ready to use
- **Article number:** 22410, 22410-01
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Hazards identification

- **Classification of the substance or mixture**



Skin Irrit. 2      H315 Causes skin irritation.  
 Eye Irritation 2A    H319 Causes serious eye irritation.  
 STOT SE 3      H335 May cause respiratory irritation.

- **Label elements**
- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**  
Causes skin irritation.  
Causes serious eye irritation.  
May cause respiratory irritation.
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
Wear protective gloves / eye protection / face protection.  
**IF INHALED:** Remove person to fresh air and keep comfortable for breathing.  
**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

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

Printing date 02.09.2022

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Trade name: *Lead Citrate Ready to use*

(Contd. of page 1)

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

### 3 Composition/information on ingredients

- **Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.
- **Dangerous components:** Void
- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### 4 First aid measures

- **Description of first aid measures**
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Firefighting measures

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

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
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.

IL

(Contd. on page 3)

# Safety data sheet

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

Printing date 02.09.2022

Revision: 02.09.2022

Trade name: *Lead Citrate Ready to use*

(Contd. of page 2)

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **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:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **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:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

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

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

Printing date 02.09.2022

Revision: 02.09.2022

Trade name: *Lead Citrate Ready to use*

(Contd. of page 3)

· **Eye protection:**

Tightly sealed goggles

## 9 Physical and chemical properties

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

· <b>Form:</b>	Liquid
· <b>Colour:</b>	Transparent
· <b>Odour:</b>	Uncharacteristic.
· <b>Odour threshold:</b>	Not determined.

· **pH-value at 20 °C:** 7· **Change in condition**

· <b>Melting point/freezing point:</b>	0 °C
· <b>Initial boiling point and boiling range:</b>	100 °C

· **Flash point:** Not applicable.· **Flammability (solid, gas):** Not applicable.· **Decomposition temperature:** Not determined.· **Auto-ignition temperature:** Product is not selfigniting.· **Explosive properties:** Product does not present an explosion hazard.· **Explosion limits:**

· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.

· **Vapour pressure at 20 °C:** 23 hPa

· <b>Density at 20 °C:</b>	1 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.

· **Solubility in / Miscibility with water:** Fully miscible.· **Partition coefficient: n-octanol/water:** Not determined.· **Viscosity:**

· <b>Dynamic:</b>	Not determined.
· <b>Kinematic:</b>	Not determined.

· **Solvent content:**

· <b>Water:</b>	97.0 %
· <b>VOC (EC)</b>	0.00 %

· **Solids content:** 0.0 %

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· **Other information**

No further relevant information available.

**10 Stability and reactivity**

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

**11 Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation** Irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

**12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **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.

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## Safety data sheet

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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b> · <b>Segregation groups</b>	Not applicable. (SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds
· <b>Stowage Category</b>	A
· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b> · <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>IMDG</b> · <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	not regulated

### 15 Regulatory information

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



GHS07

- **Signal word** Warning
- **Hazard statements**  
Causes skin irritation.  
Causes serious eye irritation.  
May cause respiratory irritation.
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
Wear protective gloves / eye protection / face protection.  
**IF INHALED:** Remove person to fresh air and keep comfortable for breathing.  
**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.  
Store locked up.

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

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

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

- **Contact:**
- **Abbreviations and acronyms:**  
*ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)*  
*IMDG: International Maritime Code for Dangerous Goods*  
*EINECS: European Inventory of Existing Commercial Chemical Substances*  
*ELINCS: European List of Notified Chemical Substances*  
*CAS: Chemical Abstracts Service (division of the American Chemical Society)*  
*VOC: Volatile Organic Compounds (USA, EU)*  
*PBT: Persistent, Bioaccumulative and Toxic*  
*vPvB: very Persistent and very Bioaccumulative*  
*Skin Irrit. 2: Skin corrosion/irritation – Category 2*  
*Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A*  
*STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*

IL

**Safety data sheet**  
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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** Lead Citrate Ready to use
- **Article number:** 22410, 22410-01
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://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**



Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2 H319 Causes serious eye irritation.  
STOT SE 3 H335 May cause respiratory irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.
- **Precautionary statements**  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves / eye protection / face protection.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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**Trade name: Lead Citrate Ready to use**

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P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

### SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.
- **Dangerous components:** Void
- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

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

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
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.

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### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
*Ensure good ventilation/exhaustion at the workplace.  
 Prevent formation of aerosols.*
- **Information about fire - and explosion protection:** *No special measures required.*
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** *No special requirements.*
- **Information about storage in one common storage facility:** *Not required.*
- **Further information about storage conditions:** *Keep container tightly sealed.*
- **7.3 Specific end use(s)** *No further relevant information available.*

### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** *No further data; see item 7.*
- **Ingredients with limit values that require monitoring at the workplace:**  
*The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.*
- **Additional information:** *The lists valid during the making were used as basis.*
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
*Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing  
 Wash hands before breaks and at the end of work.  
 Avoid contact with the eyes and skin.*
- **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:**



Protective gloves

- *The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.*
- **Penetration time of glove material**  
*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

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## · Eye protection:



Tightly sealed goggles

### SECTION 9: Physical and chemical properties

## · 9.1 Information on basic physical and chemical properties

## · General Information

## · Appearance:

Form:	Liquid
Colour:	Transparent
· Odour:	Uncharacteristic.
· Odour threshold:	Not determined.

· pH-value at 20 °C: 7

## · Change in condition

Melting point/freezing point:	0 °C
Initial boiling point and boiling range:	100 °C

· Flash point: Not applicable.

· Flammability (solid, gas): Not applicable.

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Product is not selfigniting.

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

## · Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· Vapour pressure at 20 °C: 23 hPa

· Density at 20 °C:	1 g/cm <sup>3</sup>
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.

· Solubility in / Miscibility with water: Fully miscible.

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

## · Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

## · Solvent content:

Water:	97.0 %
VOC (EC)	0.00 %

Solids content: 0.0 %

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· **9.2 Other information**

No further relevant information available.

**SECTION 10: Stability and reactivity**

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

**SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation**  
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**  
May cause respiratory irritation.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

**SECTION 12: Ecological information**

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

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### 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.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

- |  |  |
|--|--|
| · <b>14.5 Environmental hazards:</b>   | Not applicable.  |
| · <b>14.6 Special precautions for user</b>                                       | Not applicable.  |
| · <b>Segregation groups</b>  | (SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds    |
| · <b>Stowage Category</b>  | A  |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable.  |
| · <b>Transport/Additional information:</b>                                       |  |
| · <b>ADR</b>   |  |
| · <b>Excepted quantities (EQ)</b>  | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>IMDG</b>  |  |
| · <b>Excepted quantities (EQ)</b>  | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>UN "Model Regulation":</b>  | not regulated  |

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

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

- **Abbreviations and acronyms:**  
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)

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*VOC: Volatile Organic Compounds (USA, EU)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Irrit. 2: Serious eye damage/eye irritation – Category 2**STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*

GB

# 化学品安全技术说明书

据根根据据根T 16483-2008, GB/T 17519-2013

打印日期 2022.09.02

在 2022.09.02 审核

## 1 化学品及企业标识

### · 产品识别者

· 化学品中文名称: ~~化学名称~~ 化学品俗名或商品名: Lead Citrate Ready to use

· 商品编号: 22410, 22410-01

· 相应纯物质或者混合物的相关下位用途及禁止用途 无相关详细资料。

· 物质或混合物的用途 实验室化学物

### · 安全技术说明书内供应商详细信息

#### · 企业名称:

Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com

· 可获取更多资料的部门: Product safety department

#### · 紧急联系电话号码:

ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 危险性概述

### · 紧急情况概述:

透明的, 液体, 造成皮肤刺激。造成严重眼刺激。可引起呼吸道刺激。

### · GHS危险性类别



皮肤腐蚀/刺激 第2类

H315 造成皮肤刺激

严重眼损伤/眼刺激 类别2A

H319 造成严重眼刺激

特定靶器官系统毒性 (单次接触) 第3类

H335 可引起呼吸道刺激

### · 标签要素

· GHS卷标要素 本产品根据化学物质分类及标记全球协调制度(GHS)进行了分类及标记。

### · 象形图



GHS07

· 警示词 警告

### · 危险性说明

造成皮肤刺激

造成严重眼刺激

可引起呼吸道刺激

### · 防范说明

#### · 预防措施

避免吸入粉尘/烟/气体/烟雾/蒸气/喷雾

戴防护手套/防护眼罩/防护面具

#### · 事故响应

如误吸入: 将人转移到空气新鲜处, 保持呼吸舒适体位

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# 化学品安全技术说明书

据根据据根T 16483-2008, GB/T 17519-2013

打印日期 2022.09.02

在 2022.09.02 审核

化学品中文名称: 化学品俗名或商品名: Lead Citrate Ready to use

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- 如进入眼睛:用水小心冲洗几分钟。如戴隐形眼镜并可方便地取出,取出隐形眼镜。继续冲洗
- **安全储存**  
存放处须加锁
- **废弃处置**  
处置内装物/容器按照地方/区域/国家/国际规章
- **其他有害性**
- PBT(残留性、生物浓缩性、毒性物质) 及 vPvB(高残留性、高生物浓缩性物质)评价结果
- PBT(残留性、生物浓缩性、毒性物质) 不适用的
- vPvB(高残留性、高生物浓缩性物质): 不适用的

## 3 成分/组成信息

- **混合物**  
描述描述描述以下含有无害添加济的成分组成的混合物
- **危险的成分:** 无效

## 4 急救措施

- **应急措施要领**
- 吸入吸入吸入一病人不清醒时,请让病人侧 趟以便移动。
- **皮肤接触:** 马上用水和肥皂进行彻底的冲洗。
- **眼睛接触:** 张开眼睛在流水下冲洗数分钟. 如果症状仍然持续,请咨询医生。
- 食入食入食入如果症状仍然持续,请咨询医生。
- **给医生的资料:**
- **最重要的急慢性症状及其影响** 无相关详细资料。
- **需要及时的医疗处理及特别处理的症状** 无相关详细资料。

## 5 消防措施

- **灭火方法**
- **灭火的方法和灭火剂:** 使用适合四周环境的灭火措施。
- **特别危险性** 无相关详细资料。
- **特殊灭火方法**
- **消防人员特殊的防护装备:** 没有要求特别的措施。

## 6 泄漏应急处理

- **保护措施** 没有要求。
- **环境保护措施:**  
用大量的水进行稀释。  
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:**  
吸收液体粘合原料 (沙粒、硅藻土、酸性粘合剂、通用粘合剂、锯屑)。  
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的资料请参阅第 8 节。

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# 化学品安全技术说明书

据根根据据根T 16483-2008, GB/T 17519-2013

打印日期 2022.09.02

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化学品中文名称: 化学品俗名或商品名: Lead Citrate Ready to use

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有关弃置的资料请参阅第 13 节.

## 7 操作处置与储存

### · 操作处置

#### 储存

- 确保工作间有良好的通风/排气装置.
- 防止气溶胶的形成.

- **有关火灾及防止爆炸的资料:** 不需特别的措施.

### · 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** 该产品不含任何必须在工作间受到监视的重要价值的材料.

- **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.
- 避免和眼睛及皮肤接触.

##### · 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:



保护手套

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,因为该产品是由很多材料配制而成,手套材料的抵抗力并不可预计,所以,必须在使用之前进行检查

- **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

(在 4 页继续)

# 化学品安全技术说明书

据根根据据根T 16483-2008, GB/T 17519-2013

打印日期 2022.09.02

在 2022.09.02 审核

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

(在 3 页继续)

**· 眼睛防护:**



密封的护目镜

## 9 理化特性

<b>· 有关基本物理及化学特性的信息</b>	
<b>· 一般说明</b>	
外观外观外观	液体
形状形状形状	透明的
颜色颜色颜色	无特性的
气味气味气味	未决定.
· 嗅觉阈限	
· pH值 在 20 °C:	7
<b>· 条件的更改</b>	
熔点熔点熔点	0 °C
沸点沸点沸点	沸点和沸程: 100 °C
闪点闪点闪点	不适用的
<b>· 可燃性 (固体、气体):</b> 不适用的	
· 分解温度:	未决定.
· 自燃温度:	该产品是不自燃的
· 爆炸的危险性:	该产品并没有爆炸的危险
<b>· 爆炸极限:</b>	
较低较低较低	未决定.
较高较高较高	未决定.
· 蒸气压 在 20 °C:	23 hPa
密度密度密度0 °C:	1 g/cm <sup>3</sup>
· 相对密度	未决定.
· 蒸气密度	未决定.
· 蒸发速率	未决定.
<b>· 溶解性</b>	
水:	完全可拌和的
辛醇辛醇辛醇分配系数:	未决定.
<b>黏性黏性黏性</b>	
动态动态动态	未决定.
运动学的:	未决定.
<b>· 溶剂成份:</b>	
水:	97.0 %
固体成份:	0.0 %

(在 5 页继续)

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(在 4 页继续)

· 其他信息 无相关详细资料。

## 10 稳定性和反应性

- 稳定性: 无相关详细资料。
- 稳定性: 稳定
- 分解: 分解: 如果遵照规格使用则不会分解。
- 有害性: 有害: 未有已知的危险反应。
- 避免条件: 避免: 无相关详细资料。
- 不相容的物质: 不相容: 无相关详细资料。
- 危险的分解产物: 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:
- 亚慢性毒性影响:
- 皮肤: 皮肤: 刺激皮肤和粘膜。
- 在眼睛上面: 刺激的影响。
- 致敏: 致敏: 有已知的敏化影响。
- 更多毒物的资料:
- 根据有关配制的一般欧盟分类指南的计算方法 (刊印在最新版本), 该产品显示以下的危险: 刺激性的

## 12 生态学信息

- 生态毒性
- 水生毒性: 无相关详细资料。
- 持久性和降解性: 持久性和降解性: 无相关详细资料。
- 环境系统习性:
- 潜在的累积性: 潜在的累积性: 无相关详细资料。
- 土壤: 土壤: 移动性: 无相关详细资料。
- 额外的生态学资料:
- 总括注解:
- 水危害级别 1(德国规例) (通过名单进行自我评估): 对水是稍微危害的  
不要让未稀释或大量的产品接触地下水、水道或者污水系统。
- PBT(残留性、生物浓缩性、毒性物质) 及 vPvB(高残留性、高生物浓缩性物质) 评价结果
- PBT(残留性、生物浓缩性、毒性物质) 不适用的
- vPvB(高残留性、高生物浓缩性物质): 不适用的
- 其他: 其他: 无相关详细资料。

## 13 废弃处置

- 废弃处置方法
- 建议: 建议: 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)

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(在 5 页继续)

**· 受污染的容器和包装:**  
建议建议建议根据官方的规章来丢弃。  
建议建议建议清洗剂如有必要请使用水及清洁剂进行清洁。

## 14 运输信息

· 环境危害	不适用的
· 用户特别预防措施	不适用的
· Segregation groups	(SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds
· Stowage Category	A
· MARPOL73/78(针对船舶引起的海洋污染预防协议附件书根据根据国际国际船舶货物编码)大量大量运送	不适用的
<b>· 运输/额外的资料:</b>	
· ADR	
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· IMDG	
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "标准规定":	无效

## 15 法规信息

· 对相应纯物质或者混合物的安全、保健及环境法规/法律 无相关详细资料。  
· 危险化学品安全管理条例

· 危险化学品目录目录

没有列出成份

· 化学品首次进口及有毒化学品进出口环境管理规定  
· 新化学物质环境管理办法

· 中国现有化学物质名录

7732-18-5 水

7429-91-6 镉

· GHS卷标元素 本产品根据化学物质分类及标记全球协调制度(GHS)进行了分类及标记。

· 象形图



GHS07

(在 7 页继续)

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(在 6 页继续)

- **警示词** 警告
- **危险性说明**
  - 造成皮肤刺激
  - 造成严重眼刺激
  - 可引起呼吸道刺激
- **防范说明**
- **预防措施**
  - 避免吸入粉尘/烟/气体/烟雾/蒸气/喷雾
  - 戴防护手套/防护眼罩/防护面具
- **事故响应**
  - 如误吸入: 将人转移到空气新鲜处, 保持呼吸舒适体位
  - 如进入眼睛: 用水小心冲洗几分钟。如戴隐形眼镜并可方便地取出, 取出隐形眼镜。继续冲洗
- **安全储存**
  - 存放处须加锁
- **废弃处置**
  - 处置内装物/容器按照地方/区域/国家/国际规章
- **化学物质安全性评价:** 尚未进行化学物质安全性评价

## 16 其他信息

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

- **联络:**
- **缩写:**
  - ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - PBT: 持久性生物累积性有毒物质
  - vPvB: very Persistent and very Bioaccumulative
  - 皮肤腐蚀/刺激 第2类: Skin corrosion/irritation – Category 2
  - 严重眼损伤/眼刺激 类别2A: Serious eye damage/eye irritation – Category 2A
  - 特定靶器官系统毒性 (单次接触) 第3类: Specific target organ toxicity (single exposure) – Category 3

CN

# Bezpečnostní list

## podle 1907/2006/ES, Článek 31

Datum vydání: 02.09.2022

Revize: 02.09.2022

### ODDÍL 1: Identifikace látky/směsi a společnosti/podniku

- **1.1 Identifikátor výrobku**
- **Obchodní označení:** Lead Citrate Ready to use
- **Číslo výrobku:** 22410, 22410-01
- **UFI:** SMX3-X0DX-E008-EHRH
- **1.2 Příslušná určená použití látky nebo směsi a nedoporučená použití**  
Další relevantní informace nejsou k dispozici.
- **Použití látky / přípravku** Laboratorní chemikálie
- **1.3 Podrobné údaje o dodavateli bezpečnostního listu**
- **Identifikace výrobce/dovozce:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://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**



GHS07

Skin Irrit. 2 H315 Dráždí kůži.  
Eye Irrit. 2 H319 Způsobuje vážné podráždění očí.  
STOT SE 3 H335 Může způsobit podráždění dýchacích cest.

- **2.2 Prvky označení**
- **Označování v souladu s nařízením (ES) č. 1272/2008** Produkt je klasifikován a označen podle nařízení CLP.
- **Výstražné symboly nebezpečnosti**



GHS07

- **Signální slovo** Varování
- **Standardní věty o nebezpečnosti**  
H315 Dráždí kůži.  
H319 Způsobuje vážné podráždění očí.  
H335 Může způsobit podráždění dýchacích cest.
- **Pokyny pro bezpečné zacházení**  
P261 Zamezte vdechování prachu/dýmu/plynu/mlhy/par/aerosolů.  
P280 Používejte ochranné rukavice / ochranné brýle / obličejový štít.  
P304+P340 PŘI VDECHNUTÍ: Přeneste osobu na čerstvý vzduch a ponechte ji v poloze usnadňující dýchání.  
P305+P351+P338 PŘI ZASAŽENÍ OČÍ: Několik minut opatrně vyplachujte vodou. Vyjměte kontaktní čočky, jsou-li nasazeny a pokud je lze vyjmout snadno. Pokračujte ve vyplachování.

(pokračování na straně 2)

# Bezpečnostní list

## podle 1907/2006/ES, Článek 31

Datum vydání: 02.09.2022

Revize: 02.09.2022

**Obchodní označení: Lead Citrate Ready to use**

(pokračování strany 1)

P405 Skladujte uzamčené.  
 P501 Obsah/nádobu likvidujte v souladu s místními/regionálními/národními/mezinárodními předpisy.

- **2.3 Další nebezpečnost**
- **Výsledky posouzení PBT a vPvB**
- **PBT:** Nedá se použít.
- **vPvB:** Nedá se použít.

### ODDÍL 3: Složení/informace o složkách

- **3.2 Chemická charakteristika: Směsi**
- **Popis:** Směs obsahuje následné látky bez nebezpečných příměsí.
- **Výrobek obsahuje tyto nebezpečné látky:** odpadá
- **Dodatečná upozornění:** Znění uvedených údajů o nebezpečnosti látky je uvedeno v kapitole 16.

### ODDÍL 4: Pokyny pro první pomoc

- **4.1 Popis první pomoci**
- **Při nadýchání:** Při bezvědomí uložit a přepravit ve stabilní poloze na boku.
- **Při styku s kůží:** Ihned omýt vodou a mýdlem a dobře opláchnout.
- **Při zasažení očí:**  
Oči s otevřenými víčky vyplachovat po více minut proudem tekoucí vody. Při přetrvávajících potížích se poradit s lékařem.
- **Při požití:** Při přetrvávajících potížích konzultovat s lékařem.
- **4.2 Nejdůležitější akutní a opožděné symptomy a účinky** Další relevantní informace nejsou k dispozici.
- **4.3 Pokyn týkající se okamžité lékařské pomoci a zvláštního ošetření**  
Další relevantní informace nejsou k dispozici.

### ODDÍL 5: Opatření pro hašení požáru

- **5.1 Hasiva**
- **Vhodná hasiva:** Způsob hašení přizpůsobit podmínkám v okolí.
- **5.2 Zvláštní nebezpečnost vyplývající z látky nebo směsi** Další relevantní informace nejsou k dispozici.
- **5.3 Pokyny pro hasiče**
- **Zvláštní ochranné prostředky pro hasiče:** Nejsou nutná žádná zvláštní opatření.

### 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:**  
Zředit velkým množstvím vody.  
Nenechat proniknout do kanalizace/povrchových vod/podzemních vod.
- **6.3 Metody a materiál pro omezení úniku a pro čištění:**  
Sebrat s materiály, vázícími kapaliny (písek, šterkový písek, pojidla kyselin, universální pojidla, piliny).  
Zajistit dostatečné větrání.
- **6.4 Odkaz na jiné oddíly**  
Informace o bezpečnému zacházení viz kapitola 7.  
Informace o osobní ochranné výstroji viz kapitola 8.

(pokračování na straně 3)

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

Datum vydání: 02.09.2022

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**Obchodní označení: Lead Citrate Ready to use**

Informace k odstranění viz kapitola 13.

(pokračování strany 2)

### ODDÍL 7: Zacházení a skladování

- **7.1 Opatření pro bezpečné zacházení**  
Na pracovišti zabezpečit dobré větrání a odsávání.  
Zamezit vytváření aerosolů.
- **Upozornění k ochraně před ohněm a explozí:** Nejsou nutná žádná zvláštní opatření.
- **7.2 Podmínky pro bezpečné skladování látek a směsí včetně neslučitelných látek a směsí**
- **Pokyny pro skladování:**
- **Požadavky na skladovací prostory a nádoby:** Žádné zvláštní požadavky.
- **Upozornění k hromadnému skladování:** Není nutné.
- **Další údaje k podmínkám skladování:** Nádrž držet neprodyšně uzavřenou.
- **7.3 Specifické konečné / specifická konečná použití** Další relevantní informace nejsou k dispozici.

### ODDÍL 8: Omezování expozice / osobní ochranné prostředky

- **8.1 Kontrolní parametry**
- **Technická opatření:** Žádné další údaje, viz bod 7.
- **Kontrolní parametry:**  
Produkt neobsahuje žádná relevantní množství látek, u kterých se musí kontrolovat hraniční hodnoty na pracovišti.
- **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.  
Zamezit styku s pokožkou a zrakem.
- **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:**



Ochranné rukavice

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. Protože je výrobek směs více látek, nelze materiál rukavic předem vypočítat a je nutno udělat před použitím zkoušku.
- **Doba průniku materiálem rukavic**  
Je nutno u výrobce rukavic zjistit a dodržovat přesné časy průniku materiálem ochranných rukavic.

(pokračování na straně 4)



# Bezpečnostní list

## podle 1907/2006/ES, Článek 31

Datum vydání: 02.09.2022

Revize: 02.09.2022

Obchodní označení: *Lead Citrate Ready to use*

(pokračování strany 3)

· **Ochrana očí:**

Uzavřené ochranné brýle

### ODDÍL 9: Fyzikální a chemické vlastnosti

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

Skupenství:

Tekutina

Barva:

Průsvitná

· **Zápach:**

Není charakteristický.

· **Prahová hodnota zápachu:**

Není určeno.

· **Hodnota pH při 20 °C:**

7

· **Změna stavu**

Bod tání/bod tuhnutí:

0 °C

Počáteční bod varu a rozmezí bodu varu: 100 °C

· **Bod vzplanutí:**

Nedá se použít.

· **Hořlavost (pevné látky, plyny):**

Nedá se použít.

· **Teplota rozkladu:**

Není určeno.

· **Teplota samovznícení:**

Produkt není samozápalný.

· **Výbušné vlastnosti:**

U produktu nehrozí nebezpečí exploze.

· **Meze výbušnosti:**

Dolní mez:

Není určeno.

Horní mez:

Není určeno.

· **Tlak páry při 20 °C:**

23 hPa

· **Hustota při 20 °C:**1 g/cm<sup>3</sup>· **Relativní hustota**

Není určeno.

· **Hustota páry:**

Není určeno.

· **Rychlost odpařování**

Není určeno.

· **Rozpuštnost ve / směřitelnost s vodě:**

Úplně mísitelná.

· **Rozdělovací koeficient: n-oktanol/voda:**

Není určeno.

· **Viskozita:**

Dynamicky:

Není určeno.

Kinematicky:

Není určeno.

· **Obsah ředidel:**

Voda:

97,0 %

VOC (EC)

0,00 %

Obsah netěkavých složek:

0,0 %

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## · 9.2 Další informace

Další relevantní informace nejsou k dispozici.

### ODDÍL 10: Stálost a reaktivita

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

### ODDÍL 11: Toxikologické informace

- **11.1 Informace o toxikologických účincích**
- **Akutní toxicita** Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Primární dráždivé účinky:**
- **Žíravost/dráždivost pro kůži**  
Dráždí kůži.
- **Vážné poškození očí / podráždění očí**  
Způsobuje vážné podráždění očí.
- **Senzibilizace dýchacích cest / senzibilizace kůže**  
Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Doplňující toxikologická upozornění:**
- **Účinky CMR (karcinogenita, mutagenita a toxicita pro reprodukci)**
- **Mutagenita v zárodečných buňkách** Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Karcinogenita** Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Toxicita pro reprodukci** Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Toxicita pro specifické cílové orgány – jednorázová expozice**  
Může způsobit podráždění dýchacích cest.
- **Toxicita pro specifické cílové orgány – opakovaná expozice**  
Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Nebezpečnost při vdechnutí** Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.

### ODDÍL 12: Ekologické informace

- **12.1 Toxicita**
- **Aquatická toxicita:** Další relevantní informace nejsou k dispozici.
- **12.2 Perzistence a rozložitelnost** Další relevantní informace nejsou k dispozici.
- **12.3 Bioakumulační potenciál** Další relevantní informace nejsou k dispozici.
- **12.4 Mobilita v půdě** Další relevantní informace nejsou k dispozici.
- **Další ekologické údaje:**
- **Všeobecná upozornění:**  
Třída ohrožení vody 1 (Samozařazení): slabé ohrožení vody  
Nesmí se dostat nezředitý nebo ve větším množství do spodní vody, povodí nebo kanalizace.
- **12.5 Výsledky posouzení PBT a vPvB**
- **PBT:** Nedá se použít.
- **vPvB:** Nedá se použít.

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· 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.
- **Doporučený čisticí prostředek:** Voda, případně s přísadami čisticích prostředků.

### ODDÍL 14: Informace pro přepravu

- |  |  |
|--|--|
| · 14.5 Nebezpečnost pro životní prostředí:                             | Nedá se použít.  |
| · 14.6 Zvláštní bezpečnostní opatření pro uživatele                    | Nedá se použít.  |
| · Segregation groups   | (SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds    |
| · Stowage Category   | A  |
| · 14.7 Hromadná přeprava podle přílohy II úmluvy MARPOL a předpisu IBC | Nedá se použít.  |
| · Přeprava/další údaje:  |  |
| · ADR  |  |
| · Vyňatá množství (EQ)   | Kód: E1<br>Nejvyšší čisté množství na vnitřní obal: 30 ml<br>Nejvyšší čisté množství na vnější obal: 1000 ml     |
| · IMDG   |  |
| · Excepted quantities (EQ)   | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · UN "Model Regulation":   | odpadá   |

### ODDÍL 15: Informace o předpisech

- 15.1 Předpisy týkající se bezpečnosti, zdraví a životního prostředí/specifické právní předpisy týkající se látky nebo směsi
- Rady 2012/18/EU
- Nebezpečné látky jmenovitě uvedené - **PŘÍLOHA I** Žádná z obsažených látek není na seznamu.
- Rady (ES) č. 1907/2006 **PŘÍLOHA XVII** Omezující podmínky: 3
- Směrnice 2011/65/EU o omezení používání některých nebezpečných látek v elektrických a elektronických zařízeních - **Příloha II**
- Žádná z obsažených látek není na seznamu.
- **NAŘÍZENÍ (EU) 2019/1148**
- **Příloha I - PREKURZORY VÝBUŠNIN PODLÉHAJÍCÍ OMEZENÍ (Horní mezní hodnota pro účely povolení podle čl. 5 odst. 3)**
- Žádná z obsažených látek není na seznamu.

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· **Příloha II - PREKURZORY VÝBUŠNIN PODLÉHAJÍCÍ OZNAMOVÁNÍ**

Žádná z obsažených látek není na seznamu.

· **Nařízení (ES) č. 273/2004 o prekursorech drog**

Žádná z obsažených látek není na seznamu.

· **Nařízení (ES) č. 111/2005 kterým se stanoví pravidla pro sledování obchodu s prekursory drog mezi Společenstvím a třetími zeměmi**

Žádná z obsažených látek není na seznamu.

· **15.2 Posouzení chemické bezpečnosti: Posouzení chemické bezpečnosti nebylo provedeno.**

### ODDÍL 16: Další informace

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

· **Zkratky a akronymy:**

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

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Žíravost/dráždivost pro kůži – Kategorie 2

Eye Irrit. 2: Vážné poškození očí / podráždění očí – Kategorie 2

STOT SE 3: Toxicita pro specifické cílové orgány (jednorázová expozice) – Kategorie 3

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

- **1.1 Produktidentifikator**
- **Handelsnavn:** Lead Citrate Ready to use
- **Artikelnummer:** 22410, 22410-01
- **UFI:** SMX3-X0DX-E008-EHRH
- **1.2 Relevante identificerede anvendelser for stoffet eller blandingen samt anvendelser, der frarådes**  
Der står ingen yderligere, relevante informationer til rådighed.
- **Stoffets/præparatets anvendelse** Laboratoriekemikalier
- **1.3 Nærmere oplysninger om leverandøren af sikkerhedsdatabladet**
- **Producent/leverandør**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- **For yderligere information:** Product safety department
- **1.4 Nødtelefon:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## PUNKT 2: Fareidentifikation

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



GHS07

- Skin Irrit. 2 H315 Forårsager hudirritation.
- Eye Irrit. 2 H319 Forårsager alvorlig øjenirritation.
- STOT SE 3 H335 Kan forårsage irritation af luftvejene.

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



GHS07

- **Signalord** Advarsel
- **Faresætninger**  
H315 Forårsager hudirritation.  
H319 Forårsager alvorlig øjenirritation.  
H335 Kan forårsage irritation af luftvejene.
- **Sikkerhedssætninger**  
P261 Undgå indånding af pulver/røg/gas/tåge/damp/spray.  
P280 Bær beskyttelseshandsker / øjenbeskyttelse / ansigtsbeskyttelse.  
P304+P340 VED INDÅNDING: Flyt personen til et sted med frisk luft og sørg for, at vejrtrækningen lettes.

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P305+P351+P338 VED KONTAKT MED ØJNENE: Skyl forsigtigt med vand i flere minutter. Fjern eventuelle kontaktlinser, hvis dette kan gøres let. Fortsæt skylning.

P405 Opbevares under lås.

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

- **2.3 Andre farer**
- **Resultater af PBT- og vPvB-vurdering**
- **PBT:** Ikke relevant.
- **vPvB:** Ikke relevant.

### PUNKT 3: Sammensætning af/oplysning om indholdsstoffer

- **3.2 Kemisk betegnelse: Blandinger**
- **Beskrivelse:** Blanding med nedenstående stoffer med ufarlige tilsætningsstoffer.
- **Farlige indholdsstoffer:** Ikke relevant
- **Yderligere anvisninger:** Teksten til de anførte farehenvísninger fremgår af kapitel 16.

### PUNKT 4: Førstehjælpsforanstaltninger

- **4.1 Beskrivelse af førstehjælpsforanstaltninger**
- **Efter indånding:** I tilfælde af bevidstløshed skal den tilskadekomne lægges ned og transporteres i stabilt sideleje.
- **Efter hudkontakt:** Skal omgående vaskes af med vand og sæbe, skyl godt efter.
- **Efter øjenkontakt:**  
Skyl øjnene med åbent øjenlåg i flere minutter under rindende vand. Søg læge, hvis problemerne er vedvarende.
- **Efter indtagelse:** Søg læge, hvis problemerne er vedvarende.
- **4.2 Vigtigste symptomer og virkninger, både akutte og forsinkede**  
Der står ingen yderligere, relevante informationer til rådighed.
- **4.3 Angivelse af om øjeblikkelig lægehjælp og særlig behandling er nødvendig**  
Der står ingen yderligere, relevante informationer til rådighed.

### PUNKT 5: Brandbekæmpelse

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

### PUNKT 6: Forholdsregler over for udslip ved uheld

- **6.1 Personlige sikkerhedsforanstaltninger, personlige værnemidler og nødprocedurer** Ikke påkrævet.
- **6.2 Miljøbeskyttelsesforanstaltninger:**  
Fortynd med rigeligt vand.  
Må ikke udledes i kloaksystemet/overfladevand/grundvand.
- **6.3 Metoder og udstyr til inddæmning og oprensning:**  
Opsamles med væskebindende materiale (sand, kiselgur, syrebindemiddel, universalbindemiddel, savsmuld).  
Sørg for tilstrækkelig udluftning.
- **6.4 Henvísning til andre punkter**  
Information om sikker håndtering se kapitel 7.

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Informationer vedrørende personlige værnemidler se kapitel 8.  
Informationer om bortskaffelse se kapitel 13.

### PUNKT 7: Håndtering og opbevaring

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

### PUNKT 8: Eksponeringskontrol/personlige værnemidler

- **8.1 Kontrolparametre**
- **Yderligere anvisninger vedrørende udformning af tekniske anlæg:** Ingen yderligere oplysninger, se punkt 7.
- **Indholdsstoffer med arbejdspladsrelaterede grænseværdier, der skal overvåges:**  
Produktet indeholder ingen relevante mængder af stoffer med arbejdspladsrelaterede grænseværdier, der skal overvåges.
- **Yderligere anvisninger:** Baseret på de lister, der var gældende på tidspunktet for udarbejdelsen.
- **8.2 Eksponeringskontrol**
- **Personlige værnemidler:**
- **Generelle forholdsregler vedrørende beskyttelse og hygiejne:**  
Skal holdes borte fra føde- og drikkevarer og foderstoffer.  
Forurenet, gennemvædet tøj skal det tages af med det samme.  
Vask hænder inden der holdes pause og ved arbejdsophør.  
Undgå kontakt med øjne og hud.
- **Åndedrætsværn:**  
Ved kortvarig eller ringe belastning skal der benyttes åndedrætsværn med filter, ved intensiv eller længere eksponering skal der benyttes luftforsynet åndedrætsværn.
- **Håndbeskyttelse:**



Beskyttelseshandsker

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. Da produktet er et præparat af flere forskellige stoffer, kan handskematerialernes bestandighed ikke beregnes på forhånd og skal derfor efterprøves inden brugen.

- **Handskematerialets gennemtrængningstid**

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

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## · Øjenbeskyttelse:



Tætsluttende beskyttelsesbriller

## PUNKT 9: Fysiske og kemiske egenskaber

## · 9.1 Oplysninger om grundlæggende fysiske og kemiske egenskaber

## · Generelle oplysninger

## · Udseende:

Form:	Væske
Farve:	Gennemskinnelig
Lugt:	Ikke karakteristisk.
Lugttærskel:	Ikke bestemt.

· pH-værdi ved 20 °C: 7

## · Tilstandsændring

Smeltepunkt/frysepunkt:	0 °C
Begyndelseskogepunkt og kogepunktsinterval:	100 °C

· Flammepunkt: Ikke relevant.

· Antændelighed (fast stof, luftart): Ikke relevant.

· Dekomponeringstemperatur: Ikke bestemt.

· Selvantændelsestemperatur: Produktet er ikke selvantændeligt.

· Eksplosive egenskaber: Produktet er ikke eksplosivt.

## · Eksplosionsgrænser:

Nedre:	Ikke bestemt.
Øvre:	Ikke bestemt.

· Damptryk ved 20 °C: 23 hPa

Densitet ved 20 °C:	1 g/cm <sup>3</sup>
Relativ massefylde:	Ikke bestemt.
Dampmassefylde:	Ikke bestemt.
Fordampningshastighed	Ikke bestemt.

· Opløselighed i/blandbarhed med vand: Fuldt blandbar.

· Fordelingskoefficient: n-oktanol/vand: Ikke bestemt.

## · Viskositet:

dynamisk:	Ikke bestemt.
kinematisk:	Ikke bestemt.

## · Opløsningsmiddelindhold:

Vand	97,0 %
VOC (EU)	0,00 %

Tørstofindhold: 0,0 %

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· **9.2 Andre oplysninger***Der står ingen yderligere, relevante informationer til rådighed.*

### PUNKT 10: Stabilitet og reaktivitet

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

### PUNKT 11: Toksikologiske oplysninger

- **11.1 Oplysninger om toksikologiske virkninger**
- **Akut toksicitet**  
*Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.*
- **Primær irritationsvirkning:**
- **Hudætsning/irritation**  
*Forårsager hudirritation.*
- **Alvorlig øjenskade/øjenirritation**  
*Forårsager alvorlig øjenirritation.*
- **Respiratorisk sensibilisering eller hudsensibilisering**  
*Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.*
- **Yderligere toksikologiske oplysninger:**
- **CMR-virkninger (kræftfremkaldende egenskaber, mutagenicitet og reproduktionstoksicitet)**
- **Kimcellemutagenicitet**  
*Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.*
- **Kræftfremkaldende egenskaber**  
*Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.*
- **Reproduktionstoksicitet**  
*Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.*
- **Enkel STOT-eksponering**  
*Kan forårsage irritation af luftvejene.*
- **Gentagne STOT-eksponeringer**  
*Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.*
- **Aspirationsfare**  
*Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.*

### PUNKT 12: Miljøoplysninger

- **12.1 Toksicitet**
- **Toksicitet i vand:** *Der står ingen yderligere, relevante informationer til rådighed.*
- **12.2 Persistens og nedbrydelighed** *Der står ingen yderligere, relevante informationer til rådighed.*
- **12.3 Bioakkumuleringspotentiale** *Der står ingen yderligere, relevante informationer til rådighed.*
- **12.4 Mobilitet i jord** *Der står ingen yderligere, relevante informationer til rådighed.*
- **Yderligere økologiske oplysninger:**
- **Generelle anvisninger:**  
*Fareklasse for vand 1 (Selvklassificering): svagt vandforurenende*  
*Må ikke udledes i grundvandet, vandløb eller kloaksystemet uforyndet eller i større mængder.*

(Fortsættes på side 6)

# Sikkerhedsdatablad

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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: 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.
- **Anbefalet rengøringsmiddel:** Vand, eventuelt tilsat rengøringsmidler.

### PUNKT 14: Transportoplysninger

· <b>14.5 Miljøfarer:</b>	Ikke relevant.
· <b>14.6 Særlige forsigtighedsregler for brugeren</b> · <b>Segregation groups</b>	Ikke relevant. (SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds
· <b>Stowage Category</b>	A
· <b>14.7 Bulktransport i henhold til bilag II til MARPOL og IBC-koden</b>	Ikke relevant.
· <b>Transport/yderligere oplysninger:</b>	
· <b>ADR</b> · <b>Undtagne mængder (EQ)</b>	Kode: E1 Største tilladte nettomængde pr. indvendig emballage: 30 ml Største tilladte nettomængde pr. ydre emballage: 1000 ml
· <b>IMDG</b> · <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	Ikke relevant

### PUNKT 15: Oplysninger om regulering

- **15.1 Særlige bestemmelser/særlig lovgivning for stoffet eller blandingen med hensyn til sikkerhed, sundhed og miljø**
- **Direktiv 2012/18/EU**
- **Navngivne farlige stoffer - BILAG I** Ingen af indholdsstofferne er optaget i listen.
- **Forordning (EF) nr. 1907/2006 BILAG XVII** Begrænsninger: 3
- **Direktiv 2011/65/EU om begrænsning af anvendelsen af visse farlige stoffer i elektrisk og elektronisk udstyr - Bilag II**
- Ingen af indholdsstofferne er optaget i listen.

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· **FORORDNING (EU) 2019/1148**

· **Bilag I - UDANGSSTOFFER TIL EKSPLOSIVSTOFFER UNDERLAGT BEGRÆNSNINGER (Øvre grænseværdi med henblik på licens i henhold til artikel 5, stk. 3)**

Ingen af indholdsstofferne er optaget i listen.

· **Bilag II - INDBERETNINGSPLIGTIGE UDANGSSTOFFER TIL EKSPLOSIVSTOFFER**

Ingen af indholdsstofferne er optaget i listen.

· **Forordning (EF) nr. 273/2004 om narkotikaprækursorer**

Ingen af indholdsstofferne er optaget i listen.

· **Forordning (EF) Nr. 111/2005 om regler for overvågning af handel med narkotikaprækursorer mellem Fællesskabet og tredjelande**

Ingen af indholdsstofferne er optaget i listen.

· **Nationale forskrifter:**

· **MAL-Code: 00-1**

· **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 produktets egenskaber og stifter heller ikke noget kontraktligt retsforhold.

· **Forkortelser og akronymer:**

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

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

Måleteknisk Arbejdshygiejnisk Luftbehov

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Hudetsning/hudirritation – Kategori 2

Eye Irrit. 2: Alvorlige øjenskader/øjenirritation – Kategori 2

STOT/SE 3: Specifik målorgantoksicitet (enkelt eksponering) – Kategori 3

DK

# Veiligheidsinformatieblad

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

### · 1.1 Productidentificatie

· **Handelsnaam:** Lead Citrate Ready to use

· **Artikelnummer:** 22410, 22410-01

· **UFI:** SMX3-X0DX-E008-EHRH

### · 1.2 Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik

Geen verdere relevante informatie verkrijgbaar.

· **Toepassing van de stof / van de bereiding** Laboratoriumchemicaliën

### · 1.3 Details betreffende de verstrekker van het veiligheidsinformatieblad

#### · **Fabrikant/leverancier:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

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

email: [info@emsdiasum.com](mailto:info@emsdiasum.com)

[www.emsdiasum.com](http://www.emsdiasum.com)

Aurion

Binnenhaven 5

6709 PD Wageningen

The Netherlands

Tel: 31 317 415094

Fax: 31 317 415955

email: [info@aurion.nl](mailto: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**



Skin Irrit. 2 H315 Veroorzaakt huidirritatie.

Eye Irrit. 2 H319 Veroorzaakt ernstige oogirritatie.

STOT SE 3 H335 Kan irritatie van de luchtwegen veroorzaken.

### · 2.2 Etiketteringselementen

· **Etikettering overeenkomstig Verordening (EG) nr. 1272/2008**

Het product is geclassificeerd en geëtiketteerd volgens de CLP-verordening.

· **Gevarenpictogrammen**



· **Signaalwoord** Waarschuwing

· **Gevarenaanduidingen**

H315 Veroorzaakt huidirritatie.

(Vervolg op blz. 2)

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*H319 Veroorzaakt ernstige oogirritatie.**H335 Kan irritatie van de luchtwegen veroorzaken.***· Veiligheidsaanbevelingen***P261 Inademing van stof/rook/gas/nevel/damp/spuitnevel vermijden.**P280 Draag beschermende handschoenen/oogbescherming/gelaatsbescherming.**P304+P340 NA INADEMING: de persoon in de frisse lucht brengen en ervoor zorgen dat deze gemakkelijk kan ademen.**P305+P351+P338 BIJ CONTACT MET DE OGEN: voorzichtig afspoelen met water gedurende een aantal minuten; contactlenzen verwijderen, indien mogelijk; blijven spoelen.**P405 Achter slot bewaren.**P501 De inhoud en de verpakking verwerken volgens de plaatselijke/regionale/nationale/internationale voorschriften.***· 2.3 Andere gevaren****· Resultaten van PBT- en zPzB-beoordeling****· PBT:** Niet bruikbaar.**· zPzB:** Niet bruikbaar.**RUBRIEK 3: Samenstelling en informatie over de bestanddelen****· 3.2 Chemische karakterisering: Mengsels****· Beschrijving:** Mengsel van na elkaar aangevoerde stoffen met ongevaarlijke bijmengingen.**· Gevaarlijke inhoudstoffen:** Niet van toepassing**· Aanvullende gegevens:**

De woordelijke inhoud van de opgegeven aanwijzingen inzake de mogelijke gevaren is te vinden in hoofdstuk 16.

**RUBRIEK 4: Eerstehulpmaatregelen****· 4.1 Beschrijving van de eerstehulpmaatregelen****· Na het inademen:** Bij bewusteloosheid ligging en vervoer in stabiele zijligging.**· Na huidcontact:** Onmiddellijk met water en zeep afwassen en goed naspoelen.**· Na oogcontact:**

De ogen gedurende verscheidene minuten onder stromend water afspoelen terwijl de oogspleet geopend blijft. Bij aanhoudende klachten een dokter raadplegen.

**· Na inslikken:** Als de klachten niet minderen, een arts raadplegen**· 4.2 Belangrijkste acute en uitgestelde symptomen en effecten** Geen verdere relevante informatie verkrijgbaar.**· 4.3 Vermelding van de vereiste onmiddellijke medische verzorging en speciale behandeling**

Geen verdere relevante informatie verkrijgbaar.

**RUBRIEK 5: Brandbestrijdingsmaatregelen****· 5.1 Blusmiddelen****· Geschikte blusmiddelen:** Brandblusmaatregelen op omgeving afstemmen.**· 5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt**

Geen verdere relevante informatie verkrijgbaar.

**· 5.3 Advies voor brandweerlieden****· Speciale beschermende kleding:** Geen bijzondere maatregelen nodig.**RUBRIEK 6: Maatregelen bij het accidenteel vrijkomen van de stof of het mengsel****· 6.1 Persoonlijke voorzorgsmaatregelen, beschermingsmiddelen en noodprocedures** Niet nodig.

(Vervolg op blz. 3)

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- **6.2 Milieuvorzorgsmaatregelen:**  
Met veel water verdunnen.  
Niet in de riolering/het oppervlaktewater/het grondwater laten terechtkomen.
- **6.3 InsluTINGS- en reinigingsmethoden en -materiaal:**  
Met vloeistofbindend materiaal (zand, bergmeel, zuurbinder, universele binder, zaagmeel) opnemen.  
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**  
Voor goede ventilatie/afzuiging op de werkplaatsen zorgen.  
Aërosolvorming vermijden.
- **Informatie m.b.t. brand- en ontploffingsgevaar:** Geen bijzondere maatregelen noodzakelijk.
- **7.2 Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten**
- **Opslag:**
- **Eisen ten opzichte van opslagruimte en tanks:** Geen bijzondere eisen.
- **Informatie m.b.t. gezamenlijke opslag:** Niet noodzakelijk.
- **Verdere inlichtingen over eisen m.b.t. de opslag:** Tanks ondoordringbaar gesloten houden.
- **7.3 Specifiek eindgebruik** Geen verdere relevante informatie verkrijgbaar.

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

- **8.1 Controleparameters**
- **Aanvullende gegevens m.b.t. de inrichting van technische installaties:** Geen aanvullende gegevens. Zie 7.
- **Bestanddelen met grenswaarden die m.b.t. de werkruimte in acht genomen moeten worden:**  
Het produkt bevat geen relevante hoeveelheden van stoffen, die met betrekking tot de werkplaatsen, qua grenswaarden gecontroleerd moeten worden.
- **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.  
Aanraking met de ogen en de huid vermijden.
- **Ademhalingsbescherming:**  
Bij korte of geringe belasting ademfiltertoestel; bij intensieve resp. langdurige expositie een van de omringende lucht onafhankelijk ademhalingstoestel gebruiken.
- **Handbescherming:**



Veiligheidshandschoenen

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.

(Vervolg op blz. 4)

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- **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. Aangezien het product uit meerdere stoffen is samengesteld, is de duurzaamheid van de handschoenmaterialen niet vooraf berekenbaar en moet derhalve vóór het gebruik worden getest.

- **Doordringingstijd van het handschoenmateriaal**

De precieze penetratietijd kunt u te weten komen bij de handschoenfabrikant; houd er rekening mee.

- **Oogbescherming:**



Nauw aansluitende veiligheidsbril

### RUBRIEK 9: Fysische en chemische eigenschappen

- **9.1 Informatie over fysische en chemische basiseigenschappen**

- **Algemene gegevens**

- **Voorkomen:**

<b>Vorm:</b>	Vloeistof
<b>Kleur:</b>	Doorschijnend
<b>Geur:</b>	Niet karakteristiek.
<b>Geurdrempelwaarde:</b>	Niet bepaald.

- **pH-waarde bij 20 °C:** 7

- **Toestandsverandering**

<b>Smelt-/vriespunt:</b>	0 °C
<b>Beginkookpunt en kooktraject:</b>	100 °C

- **Vlampunt:** Niet bruikbaar.

- **Ontvlambaarheid (vast, gas):** Niet bruikbaar.

- **Ontledingstemperatuur:** Niet bepaald.

- **Zelfontbrandingstemperatuur:** Het produkt ontbrandt niet uit zichzelf.

- **Ontploffingseigenschappen:** Het produkt is niet ontploffingsgevaarlijk.

- **Ontploffingsgrenzen:**

<b>Onderste:</b>	Niet bepaald.
<b>Bovenste:</b>	Niet bepaald.

- **Dampspanning bij 20 °C:** 23 hPa

<b>Dichtheid bij 20 °C:</b>	1 g/cm <sup>3</sup>
<b>Relatieve dichtheid</b>	Niet bepaald.
<b>Dampdichtheid</b>	Niet bepaald.
<b>Verdampingsnelheid</b>	Niet bepaald.

- **Oplosbaarheid in/mengbaarheid met Water:** Volledig mengbaar.

- **Verdelingscoëfficiënt: n-octanol/water:** Niet bepaald.

- **Viscositeit**

<b>Dynamisch:</b>	Niet bepaald.
<b>Kinematisch:</b>	Niet bepaald.

(Vervolg op blz. 5)

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<b>· Oplosmiddelgehalte:</b>	
Water:	97,0 %
VOC (EG)	0,00 %
<b>Gehalte aan vaste bestanddelen:</b>	0,0 %
<b>· 9.2 Overige informatie</b>	Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 10: Stabiliteit en reactiviteit

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

### RUBRIEK 11: Toxicologische informatie

- **11.1 Informatie over toxicologische effecten**
- **Acute toxiciteit** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Primaire aandoening:**
- **Huidcorrosie/-irritatie**  
Veroorzaakt huidirritatie.
- **Ernstig oogletsel/oogirritatie**  
Veroorzaakt ernstige oogirritatie.
- **Sensibilisatie van de luchtwegen/de huid**  
Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Aanvullende toxicologische informatie:**
- **CMR-effecten (kankerverwekkendheid, mutageniteit en giftigheid voor de voortplanting)**
- **Mutageniteit in geslachtscellen** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Kankerverwekkendheid** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Giftigheid voor de voortplanting** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **STOT bij eenmalige blootstelling**  
Kan irritatie van de luchtwegen veroorzaken.
- **STOT bij herhaalde blootstelling** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Gevaar bij inademing** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.

### RUBRIEK 12: Ecologische informatie

- **12.1 Toxiciteit**
- **Aquatische toxiciteit:** Geen verdere relevante informatie verkrijgbaar.
- **12.2 Persistentie en afbreekbaarheid** Geen verdere relevante informatie verkrijgbaar.
- **12.3 Bioaccumulatie** Geen verdere relevante informatie verkrijgbaar.
- **12.4 Mobiliteit in de bodem** Geen verdere relevante informatie verkrijgbaar.
- **Verdere ecologische informatie:**
- **Algemene informatie:**  
Waterbezwaarlijkheid (NL): B(4) Weinig schadelijk voor in water levende organismen  
Gevaar voor water klasse 1 (D) (Zelfclassificatie): gevaar voor water klein  
Niet onverdund of in grote hoeveelheden lozen in grondwater, in oppervlaktewater of in de riolering.

(Vervolg op blz. 6)



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- **12.5 Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.
- **12.6 Andere schadelijke effecten** Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 13: Instructies voor verwijdering

- **13.1 Afvalverwerkingsmethoden**
- **Aanbeveling:** Mag niet tesamen met huisvuil gestort worden of in de riolering terechtkomen.
- **Niet gereinigde verpakkingen:**
- **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.
- **Aanbevolen reinigingsmiddel:** Water, eventueel met toevoeging van reinigingsmiddelen.

### RUBRIEK 14: Informatie met betrekking tot het vervoer

- |  |  |
|--|--|
| · <b>14.5 Milieugevaren:</b>   | Niet bruikbaar.  |
| · <b>14.6 Bijzondere voorzorgen voor de gebruiker</b><br>· <b>Segregation groups</b> | Niet bruikbaar.<br>(SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds |
| · <b>Stowage Category</b>  | A  |
| · <b>14.7 Vervoer in bulk overeenkomstig bijlage II bij Marpol en de IBC-code</b>    | Niet bruikbaar.  |
| · <b>Transport/verdere gegevens:</b>   |  |
| · <b>ADR</b><br>· <b>Uitgezonderde hoeveelheden (EQ)</b>                             | Code: E1<br>Grootste netto hoeveelheid per binnenverpakking: 30 ml<br>Grootste netto hoeveelheid per buitenverpakking: 1000 ml   |
| · <b>IMDG</b><br>· <b>Excepted quantities (EQ)</b>                                   | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml                 |
| · <b>VN "Model Regulation":</b>  | Niet van toepassing  |

### RUBRIEK 15: Regelgeving

- **15.1 Specifieke veiligheids-, gezondheids- en milieureglementen en -wetgeving voor de stof of het mengsel**

- **SZW-lijst van kankerverwekkende stoffen**

geen der bestanddelen staat op de lijst.

- **SZW-lijst van mutagene stoffen**

geen der bestanddelen staat op de lijst.

- **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid**

geen der bestanddelen staat op de lijst.

- **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling**

geen der bestanddelen staat op de lijst.

(Vervolg op blz. 7)

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· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding**

geen der bestanddelen staat op de lijst.

· **Lijst Zeer Zorgwekkende Stoffen (ZZS)**

geen der bestanddelen staat op de lijst.

· **Lijst van Potentieel Zeer Zorgwekkende Stoffen**

geen der bestanddelen staat op de lijst.

· **Richtlijn 2012/18/EU**

· **Gevaarlijke stoffen die met naam genoemd worden - BIJLAGE I** geen der bestanddelen staat op de lijst.

· **Verordening (EG) nr. 1907/2006 BIJLAGE XVII** Beperkingsvoorwaarden: 3

· **Richtlijn 2011/65/EU betreffende beperking van het gebruik van bepaalde gevaarlijke stoffen in elektrische en elektronische apparatuur - Bijlage II**

geen der bestanddelen staat op de lijst.

· **VERORDENING (EU) 2019/1148**

· **Bijlage I - PRECURSOREN VOOR EXPLOSIEVEN WAARVOOR EEN BEPERKING GELDT (Bovengrenswaarde ten behoeve van vergunningverlening op grond van artikel 5, lid 3)**

geen der bestanddelen staat op de lijst.

· **Bijlage II - PRECURSOREN VOOR EXPLOSIEVEN DIE MOETEN WORDEN GEMELD**

geen der bestanddelen staat op de lijst.

· **Verordening (EG) nr. 273/2004 inzake drugsprecursoren**

geen der bestanddelen staat op de lijst.

· **Verordening (EG) Nr. 111/2005 houdende voorschriften voor het toezicht op de handel tussen de Gemeenschap en derde landen in drugsprecursoren**

geen der bestanddelen staat op de lijst.

· **Nationale voorschriften:**

· **Gevaarklasse v. water:** Waterbezwaarlijkheid (NL): B(4) Weinig schadelijk voor in water levende organismen

· **15.2 Chemischeveiligheidsbeoordeling:** Een chemische veiligheidsbeoordeling is niet uitgevoerd.

### RUBRIEK 16: Overige informatie

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

· **Afkortingen en acroniemen:**

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

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Huidcorrosie/-irritatie – Categorie 2

Eye Irrit. 2: Ernstig oogletsel/oogirritatie – Categorie 2

STOT SE 3: Specifieke doelorgaantoxiciteit bij eenmalige blootstelling – Categorie 3

# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 02.09.2022

Tarkistus: 02.09.2022

### KOHTA 1: Aineen tai seoksen ja yhtiön tai yrityksen tunnistetiedot

- **1.1 Tuotetunniste**
- **Kauppanimike:** Lead Citrate Ready to use
- **Artikkelinumero:** 22410, 22410-01
- **UFI:** SMX3-X0DX-E008-EHRH
- **1.2 Aineen tai seoksen merkitykselliset tunnistetut käytöt ja käytöt, joita ei suositella**  
Merkittäviä lisätietoja ei ole saatavilla.
- **Aineen / valmisteen käyttö** Laboratoriokemikaalit
- **1.3 Käyttöturvallisuustiedotteen toimittajan tiedot**
- **Valmistaja/toimittaja:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- **Tietoja antaa:** Product safety department
- **1.4 Häätöpuhelinnumero:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### KOHTA 2: Vaaran yksilöinti

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



GHS07

Skin Irrit. 2 H315 Ärsyttää ihoa.  
Eye Irrit. 2 H319 Ärsyttää voimakkaasti silmiä.  
STOT SE 3 H335 Saattaa aiheuttaa hengitysteiden ärsytystä.

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



GHS07

- **Huomiosana** Varoitus
- **Vaaralausekkeet**  
H315 Ärsyttää ihoa.  
H319 Ärsyttää voimakkaasti silmiä.  
H335 Saattaa aiheuttaa hengitysteiden ärsytystä.
- **Turvalausekkeet**  
P261 Vältä pölyn/savun/kaasun/sumun/höyryn/suihkeen hengittämistä.  
P280 Käytä suojakäsineitä / silmiensuojainta / kasvonsuojainta.  
P304+P340 JOS KEMIKAALIA ON HENGITETTY: Siirrä henkilö raittiiseen ilmaan ja varmista vaivaton hengitys.  
P305+P351+P338 JOS KEMIKAALIA JOUTUU SILMIIN: Huuhto huolellisesti vedellä usean minuutin ajan. Poista mahdolliset piilolinssit, jos sen voi tehdä helposti. Jatka huuhtomista.

(jatkuu sivulla 2)

# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 02.09.2022

Tarkistus: 02.09.2022

**Kauppanimike: Lead Citrate Ready to use**

(jatkuu sivulla 1)

- P405 Varastoi lukitussa tilassa.  
 P501 Hävitä säiliö(t) noudattaen paikallisia/alueellisia/kansallisia/kansainvälisiä määräyksiä.
- **2.3 Muut vaarat**
  - **PBT- ja vPvB-arvioinnin tulokset**
  - **PBT:** Ei voida käyttää.
  - **vPvB:** Ei voida käyttää.

### KOHTA 3: Koostumus ja tiedot aineosista

- **3.2 Kemialliset ominaisuudet: Seokset**
- **Selostus:** Seuraavista aineista koostuva seos, jossa vaarattomia lisäaineita.
- **Sisältää vaarallisia aineita:** tarpeeton
- **Lisätietoja:** Annettujen turvaohjeiden sanamuoto kappaleesta 16.

### KOHTA 4: Ensiaputoimenpiteet

- **4.1 Ensiaputoimenpiteiden kuvaus**
- **Hengitettynä:** Tajuton pidettävä ja kuljetettava kyljellään.
- **Ihokosketuksessa:** Pestävä heti vedellä ja saippualla ja huuhdottava hyvin.
- **Aineen päästyä silmiin:**  
 Silmiä huuhdotaan luomet auki juoksevan veden alla useita minutteja. Oireiden kestäessä käännetään lääkärin puoleen.
- **Nieltyä:** Käännettävä lääkärin puoleen oireiden jatkuessa.
- **4.2 Tärkeimmät oireet ja vaikutukset, sekä välittömät että viivästyneet** Merkittäviä lisätietoja ei ole saatavilla.
- **4.3 Mahdollisesti tarvittavaa välitöntä lääketieteellistä apua ja erityishoitoa koskevat ohjeet**  
 Merkittäviä lisätietoja ei ole saatavilla.

### KOHTA 5: Palontorjuntatoimenpiteet

- **5.1 Sammutusaineet**
- **Sopivat sammutusaineet:** Palontorjuntatoimenpiteet ympäristöä vastaavasti.
- **5.2 Aineesta tai seoksesta johtuvat erityiset vaarat** Merkittäviä lisätietoja ei ole saatavilla.
- **5.3 Palontorjuntaa koskevat ohjeet**
- **Eriytyinen suojavarustus:** Erikoistoimenpiteitä ei tarvita.

### KOHTA 6: Toimenpiteet onnettomuspäästöissä

- **6.1 Varotoimenpiteet, henkilönsuojaimet ja menettely hätätilanteessa** Ei tarvita.
- **6.2 Ympäristöön kohdistuvat varotoimet:**  
 Ohennettava runsaalla vedellä.  
 Estettävä pääsy viemäreihin/pintavesiin/pohjaveteen.
- **6.3 Suojarakenteita ja puhdistusta koskevat menetelmät ja -välineet:**  
 Imettävä nestettä sitovalla aineella (hiekkä, piimaa, hapon sidosaine, yleisidosaine, sahajauho).  
 Huolehdittava riittävästä tuuleutuksesta.
- **6.4 Viittäukset muihin kohtiin**  
 Turvallista käsittelyä koskevia ohjeita kappaleessa 7.  
 Henkilökohtaisista suojavarustusta koskevia ohjeita kappaleessa 8.  
 Aineen hävitystä koskevia ohjeita kappaleessa 13.

FI

(jatkuu sivulla 3)

# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 02.09.2022

Tarkistus: 02.09.2022

Kauppanimike: *Lead Citrate Ready to use*

(jatkuu sivulla 2)

### KOHTA 7: Käsittely ja varastointi

- **7.1 Turvallisen käsittelyn edellyttämät toimenpiteet**  
Huolehdittava hyvästä tuuletuksesta/imusta työpaikalla.  
Vältettävä aerosolin muodostusta.
- **Palo- ja räjähdysuojaohjeet:** Erikoistoimenpiteitä ei tarvita.
- **7.2 Turvallisen varastoinnin edellyttämät olosuhteet, mukaan luettuina yhteensopimattomuudet**
- **Varastointi:**
- **Varastotiloille ja säiliöille asetettavat vaatimukset:** Ei erikoisvaatimuksia.
- **Yhteisvarastointiohjeet:** Ei tarvita.
- **Lisätietoja varastointiehtoihin:** Astiat on pidettävä tiiviisti suljettuina.
- **7.3 Erityinen loppukäyttö** Merkittäviä lisätietoja ei ole saatavilla.

### KOHTA 8: Altistumisen ehkäiseminen ja henkilösuojaimet

- **8.1 Valvontaa koskevat muuttujat**
- **Lisäohjeita teknisten laitteiden varustukseen:** Ei muita tietoja, ks. kohta 7.
- **Aineosat työpaikkakohtaisin valvottavin raja-arvoin:**  
Tuote ei sisällä merkityksellisiä määriä aineita työpaikkakohtaisilla valvottavilla raja-arvoilla.
- **Lisäohjeet:** Tiedot perustuvat valmistushetkellä voimassaoleviin luetteloihin.
- **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.  
Vältettävä ihokosketusta ja kosketusta silmiin.
- **Hengityssuoja:**  
Lyhytaikaisessa tai vähäisessä altistuksessa hengityssuojasuodin; intensiivisessä tai pitempiaikaisessa rasituksessa ulkoilmasta riippumaton hengityssuojain.
- **Käsisuojus:**



Suojakäsineet

- Käsin materiaalin tulee olla tuotetta/ainetta/valmistetta kestävä ja läpäisemätöntä.  
Puuttuvien testien vuoksi suositusta soveltuvasta suojakäsinmateriaalista tuotteelle/ valmisteelle / kemikaalisekoitteelle ei voida antaa.  
Suojakäsinmateriaalin valinnassa on otettava huomioon läpäisyajat, läpäisevyyskerroin ja kuluminen.
- **Käsinmateriaali**  
Soveltuvan käsinetyypin valikoima ei riipu yksinomaan materiaalista vaan myös muista laatuominaisuuksista ja vaihtelee eri valmistajilla. Koska tuote on valmiste, joka koostuu eri aineista, ei suojakäsinmateriaalin kestävyys ole ennalta arvioitavissa vaan pitää tarkistaa ennen käyttöä.
  - **Käsinmateriaalin läpäisy aika**  
Tarkka läpäisy aika on selvitettävä suojakäsinevalmistajalta ja sitä on noudatettava.

(jatkuu sivulla 4)

# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 02.09.2022

Tarkistus: 02.09.2022

Kauppanimike: Lead Citrate Ready to use

(jatkuu sivulla 3)

· Silmäsuojus:



Tiiviit suojalasit

### KOHTA 9: Fysikaaliset ja kemialliset ominaisuudet

· 9.1 Fysikaalisia ja kemiallisia perusominaisuuksia koskevat tiedot

· Yleiset ohjeet

· Olomuoto:

Muoto: Neste

Väri: Läpikuultava

· Haju: Ei-tyypillinen.

· Hajukynnys: Ei määrätty.

· pH-arvo 20 °C lämpötilassa: 7

· Tilanmuutos

Sulamis- tai jäätymispiste: 0 °C

Kiehumispiste ja kiehumisalue: 100 °C

· Leimahduspiste: Ei voida käyttää.

· Syttyvyys (kiinteät aineet, kaasut): Ei voida käyttää.

· Hajoamislämpötila: Ei määrätty.

· Itsesyttymislämpötila: Tuote ei ole itsestään syttyvä.

· Räjähätvyys: Tuote ei ole räjähdysvaarallinen.

· Räjähdyksrajat:

Alempi: Ei määrätty.

Ylempi: Ei määrätty.

· Höyrypaine 20 °C lämpötilassa: 23 hPa

· Tiheys 20 °C lämpötilassa: 1 g/cm<sup>3</sup>

· Suhteellinen tiheys: Ei määrätty.

· Höyryntiheys: Ei määrätty.

· Haihtumisnopeus: Ei määrätty.

· Liukenevuus/sekoittuvuus

veteen: Täydellisesti sekoittuva.

· Jakautumiskerroin: n-oktanolivesi: Ei määrätty.

· Viskositeetti:

Dynaaminen: Ei määrätty.

Kinemaattinen: Ei määrätty.

· Liuoteainepitoisuus:

Vesi: 97,0 %

VOC (EY) 0,00 %

Käinneainepitoisuus: 0,0 %

(jatkuu sivulla 5)

# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 02.09.2022

Tarkistus: 02.09.2022

Kauppanimike: *Lead Citrate Ready to use*

(jatkuu sivulla 4)

· **9.2 Muut tiedot**

Merkittäviä lisätietoja ei ole saatavilla.

### KOHTA 10: Stabiilisuus ja reaktiivisuus

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

### KOHTA 11: Myrkyllisyyteen liittyvät tiedot

- **11.1 Tiedot myrkyllisistä vaikutuksista**
- **Välitön myrkyllisyys** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Ensisijainen ärsyttävä vaikutus:**
- **Ihosityttövyys/ihoärsytys**  
Ärsyttää ihoa.
- **Vakava silmävaurio/silmä-ärsytys**  
Ärsyttää voimakkaasti silmiä.
- **Hengitysteiden tai ihon herkistyminen** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Toksikologia lisätietoja:**
- **CMR-vaikutukset eli syöpää aiheuttavat, perimää vaurioittavat ja lisääntymiselle vaaralliset vaikutukset**
- **Sukusolujen perimää vaurioittavat vaikutukset** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Syöpää aiheuttavat vaikutukset** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Lisääntymiselle vaaralliset vaikutukset** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Elinkohtainen myrkyllisyys – kerta-altistuminen**  
Saattaa aiheuttaa hengitysteiden ärsytystä.
- **Elinkohtainen myrkyllisyys – toistuva altistuminen**  
Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Aspiraatiovaara** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.

### KOHTA 12: Tiedot vaarallisuudesta ympäristölle

- **12.1 Myrkyllisyys**
- **Vesimyrkyllisyys:** Merkittäviä lisätietoja ei ole saatavilla.
- **12.2 Pysyvyys ja hajoavuus** Merkittäviä lisätietoja ei ole saatavilla.
- **12.3 Biokertyvyys** Merkittäviä lisätietoja ei ole saatavilla.
- **12.4 Liikkuvuus maaperässä** Merkittäviä lisätietoja ei ole saatavilla.
- **Ekologia lisätietoja:**
- **Yleisohjeita:**  
Vesistövaarallisuusluokka 1 (Oma luokitus): lievästi vesistöä vaarantava  
Estetään aineen pääsy ohentamattomana tai suurina määrinä pohjaveteen, vesistöihin, viemäristöön.
- **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.

FI

(jatkuu sivulla 6)

# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 02.09.2022

Tarkistus: 02.09.2022

Kauppanimike: Lead Citrate Ready to use

(jatkuu sivulla 5)

### 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.
- **Suosittelava puhdistusaine:** Vesi, johon tarvittaessa lisätään puhdistusainetta.

### KOHTA 14: Kuljetustiedot

- |   |  |
|---|--|
| · <b>14.5 Ympäristövaarat:</b>  | Ei voida käyttää.  |
| · <b>14.6 Erityiset varotoimet käyttäjälle</b><br>· <b>Segregation groups</b>                 | Ei voida käyttää.<br>(SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds |
| · <b>Stowage Category</b>   | A  |
| · <b>14.7 Kuljetus irtolastina Marpol-sopimuksen II liitteen ja IBC-säännösten mukaisesti</b> | Ei voida käyttää.  |
| · <b>Kuljetus/lisätietoja:</b>  |  |
| · <b>ADR</b><br>· <b>Poikkeusmäärät (EQ)</b>  | Koodi: E1<br>Enimmäisnettomäärä sisäpakkausta kohti: 30 ml<br>Enimmäisnettomäärä ulkopakkausta kohti: 1000 ml                      |
| · <b>IMDG</b><br>· <b>Excepted quantities (EQ)</b>  | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml                   |
| · <b>UN "Model Regulation":</b>   | tarpeeton  |

### KOHTA 15: Lainsäädäntöä koskevat tiedot

- **15.1 Nimenomaisesti ainetta tai seosta koskevat turvallisuus-, terveys- ja ympäristösäännökset tai -lainsäädäntö**
- **Direktiivi 2012/18/EU**
- **Nimetyt vaaralliset aineet - LIITE I** sisältäviä aineita ei ole lueteltu
- **NEUVOSTON ASETUS (EY) N:o 1907/2006 LIITE XVII** Rajoitusehdot: 3
- **Direktiivi 2011/65/EU tiettyjen vaarallisten aineiden käytön rajoittamisesta sähkö- ja elektroniikkalaitteissa - Liite II**  
sisältäviä aineita ei ole lueteltu
- **ASETUS (EU) 2019/1148**
- **Liite I - RAJOITETUT RÄJÄHTEIDEN LÄHTÖAINEET (Yläraja-arvo lupien myöntämiseksi 5 artiklan 3 kohdan mukaisesti)**  
sisältäviä aineita ei ole lueteltu
- **Liite II - ILMOITETTAVAT RÄJÄHTEIDEN LÄHTÖAINEET**  
sisältäviä aineita ei ole lueteltu

(jatkuu sivulla 7)



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

Painatuspäivämäärä 02.09.2022

Tarkistus: 02.09.2022

**Kauppanimike: Lead Citrate Ready to use**

(jatkuu sivulla 6)

· **Asetus (EY) N:o 273/2004 huumausaineiden lähtöaineista**

sisältäviä aineita ei ole lueteltu

· **Asetus (EY) N:o 111/2005 yhteisön ja kolmansien maiden välisen huumausaineiden lähtöaineiden kaupan valvontaa koskevista säännöistä**

sisältäviä aineita ei ole lueteltu

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

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Ihosyövyttävyyssihoärsytys – Katgoria 2

Eye Irrit. 2: Vakava silmävaurio/silmä-ärsytys – Katgoria 2

STOT SE 3: Elinkohtainen myrkyllisyys (kerta-altistuminen) – Katgoria 3

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 02.09.2022

Révision: 02.09.2022

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

- **1.1 Identificateur de produit**
- **Nom du produit:** Lead Citrate Ready to use
- **Code du produit:** 22410, 22410-01
- **UFI:** SMX3-X0DX-E008-EHRH
- **1.2 Utilisations identifiées pertinentes de la substance ou du mélange et utilisations déconseillées**  
Pas d'autres informations importantes disponibles.
- **Emploi de la substance / de la préparation** Produits chimiques pour laboratoires
- **1.3 Renseignements concernant le fournisseur de la fiche de données de sécurité**
- **Producteur/fournisseur:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- **Service chargé des renseignements:** Product safety department
- **1.4 Numéro d'appel d'urgence:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### RUBRIQUE 2: Identification des dangers

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



GHS07

- Skin Irrit. 2 H315 Provoque une irritation cutanée.
- Eye Irrit. 2 H319 Provoque une sévère irritation des yeux.
- STOT SE 3 H335 Peut irriter les voies respiratoires.

- **2.2 Éléments d'étiquetage**
- **Etiquetage selon le règlement (CE) n° 1272/2008** Le produit est classifié et étiqueté selon le règlement CLP.
- **Pictogrammes de danger**



GHS07

- **Mention d'avertissement** Attention
- **Mentions de danger**  
H315 Provoque une irritation cutanée.  
H319 Provoque une sévère irritation des yeux.  
H335 Peut irriter les voies respiratoires.
- **Conseils de prudence**  
P261 Éviter de respirer les poussières/fumées/gaz/brouillards/vapeurs/aérosols.  
P280 Porter des gants de protection / un équipement de protection des yeux / un équipement de protection du visage.

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# Fiche de données de sécurité

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**Nom du produit:** *Lead Citrate Ready to use*

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- P304+P340 *EN CAS D'INHALATION: transporter la personne à l'extérieur et la maintenir dans une position où elle peut confortablement respirer.*
- P305+P351+P338 *EN CAS DE CONTACT AVEC LES YEUX: Rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.*
- P405 *Garder sous clef.*
- P501 *Éliminer le contenu/réceptacle conformément à la réglementation locale/régionale/nationale/internationale.*

- **2.3 Autres dangers**
- **Résultats des évaluations PBT et vPvB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.

### RUBRIQUE 3: Composition/informations sur les composants

- **3.2 Caractérisation chimique: Mélanges**
- **Description:** Mélange des substances mentionnées à la suite avec des additifs non dangereux.
- **Composants dangereux:** néant
- **Indications complémentaires:** Pour le libellé des phrases de risque citées, se référer au chapitre 16.

### RUBRIQUE 4: Premiers secours

- **4.1 Description des premiers secours**
- **Après inhalation:** En cas d'inconscience, coucher et transporter la personne en position latérale stable.
- **Après contact avec la peau:** Laver immédiatement à l'eau et au savon et bien rincer.
- **Après contact avec les yeux:**  
Rincer les yeux, pendant plusieurs minutes, sous l'eau courante en écartant bien les paupières. Si les troubles persistent, consulter un médecin.
- **Après ingestion:** Si les troubles persistent, consulter un médecin.
- **4.2 Principaux symptômes et effets, aigus et différés** Pas d'autres informations importantes disponibles.
- **4.3 Indication des éventuels soins médicaux immédiats et traitements particuliers nécessaires**  
Pas d'autres informations importantes disponibles.

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

- **5.1 Moyens d'extinction**
- **Moyens d'extinction:** Adapter les mesures d'extinction d'incendie à l'environnement.
- **5.2 Dangers particuliers résultant de la substance ou du mélange**  
Pas d'autres informations importantes disponibles.
- **5.3 Conseils aux pompiers**
- **Équipement spécial de sécurité:** Aucune mesure particulière n'est requise.

### RUBRIQUE 6: Mesures à prendre en cas de dispersion accidentelle

- **6.1 Précautions individuelles, équipement de protection et procédures d'urgence** Pas nécessaire.
- **6.2 Précautions pour la protection de l'environnement:**  
Diluer avec beaucoup d'eau.  
Ne pas rejeter dans les canalisations, dans les eaux de surface et dans les nappes d'eau souterraines.

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- **6.3 Méthodes et matériel de confinement et de nettoyage:**  
Recueillir les liquides à l'aide d'un produit absorbant (sable, kieselguhr, neutralisant d'acide, liant universel, sciure).  
Assurer une aération suffisante.
- **6.4 Référence à d'autres rubriques**  
Afin d'obtenir des informations pour une manipulation sûre, consulter le chapitre 7.  
Afin d'obtenir des informations sur les équipements de protection personnels, consulter le chapitre 8.  
Afin d'obtenir des informations sur l'élimination, consulter le chapitre 13.

### RUBRIQUE 7: Manipulation et stockage

- **7.1 Précautions à prendre pour une manipulation sans danger**  
Veiller à une bonne ventilation/aspiration du poste de travail.  
Eviter la formation d'aérosols.
- **Préventions des incendies et des explosions:** Aucune mesure particulière n'est requise.
- **7.2 Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités**
- **Stockage:**
- **Exigences concernant les lieux et conteneurs de stockage:** Aucune exigence particulière.
- **Indications concernant le stockage commun:** Pas nécessaire.
- **Autres indications sur les conditions de stockage:** Tenir les emballages hermétiquement fermés.
- **7.3 Utilisation(s) finale(s) particulière(s)** Pas d'autres informations importantes disponibles.

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

- **8.1 Paramètres de contrôle**
- **Indications complémentaires pour l'agencement des installations techniques:**  
Sans autre indication, voir point 7.
- **Composants présentant des valeurs-seuil à surveiller par poste de travail:**  
Le produit ne contient pas en quantité significative des substances présentant des valeurs-seuil à surveiller par poste de travail.
- **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.  
Eviter tout contact avec les yeux et avec la peau.
- **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:**



Gants de protection

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.

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· **Matériau des gants**

*Le choix de gants appropriés dépend non seulement du matériau, mais aussi d'autres critères de qualité qui peuvent varier d'un fabricant à l'autre. Puisque le produit représente une préparation composée de plusieurs substances, la résistance des matériaux des gants ne peut pas être calculée à l'avance et doit, alors, être contrôlée avant l'utilisation.*

· **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:**



*Lunettes de protection hermétiques*

### RUBRIQUE 9: Propriétés physiques et chimiques

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

· **Indications générales**

· **Aspect:**

<b>Forme:</b>	<i>Liquide</i>
<b>Couleur:</b>	<i>Translucide</i>
<b>Odeur:</b>	<i>Non caractéristique</i>
<b>Seuil olfactif:</b>	<i>Non déterminé.</i>

· **valeur du pH à 20 °C:** *7*

· **Changement d'état**

<b>Point de fusion/point de congélation:</b>	<i>0 °C</i>
<b>Point initial d'ébullition et intervalle d'ébullition:</b>	<i>100 °C</i>

· **Point d'éclair** *Non applicable.*

· **Inflammabilité (solide, gaz):** *Non applicable.*

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

· **Température d'auto-inflammabilité:** *Le produit ne s'enflamme pas spontanément.*

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

· **Limites d'explosion:**

<b>Inférieure:</b>	<i>Non déterminé.</i>
<b>Supérieure:</b>	<i>Non déterminé.</i>

· **Pression de vapeur à 20 °C:** *23 hPa*

<b>Densité à 20 °C:</b>	<i>1 g/cm<sup>3</sup></i>
<b>Densité relative</b>	<i>Non déterminé.</i>
<b>Densité de vapeur:</b>	<i>Non déterminé.</i>
<b>Taux d'évaporation:</b>	<i>Non déterminé.</i>

· **Solubilité dans/miscibilité avec l'eau:**

*Entièrement miscible*

· **Coefficient de partage: n-octanol/eau:** *Non déterminé.*

· **Viscosité:**

<b>Dynamique:</b>	<i>Non déterminé.</i>
<b>Cinématique:</b>	<i>Non déterminé.</i>

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<b>· Teneur en solvants:</b>	
<i>Eau:</i>	97,0 %
<i>VOC (CE)</i>	0,00 %
<b>Teneur en substances solides:</b>	
	0,0 %
<b>· 9.2 Autres informations</b>	<i>Pas d'autres informations importantes disponibles.</i>

### RUBRIQUE 10: Stabilité et réactivité

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

### RUBRIQUE 11: Informations toxicologiques

- **11.1 Informations sur les effets toxicologiques**
- **Toxicité aiguë** *Compte tenu des données disponibles, les critères de classification ne sont pas remplis.*
- **Effet primaire d'irritation:**
- **Corrosion cutanée/irritation cutanée**  
*Provoque une irritation cutanée.*
- **Lésions oculaires graves/irritation oculaire**  
*Provoque une sévère irritation des yeux.*
- **Sensibilisation respiratoire ou cutanée**  
*Compte tenu des données disponibles, les critères de classification ne sont pas remplis.*
- **Indications toxicologiques complémentaires:**
- **Effets CMR (cancérogène, mutagène et toxique pour la reproduction)**
- **Mutagénicité sur les cellules germinales**  
*Compte tenu des données disponibles, les critères de classification ne sont pas remplis.*
- **Cancérogénicité** *Compte tenu des données disponibles, les critères de classification ne sont pas remplis.*
- **Toxicité pour la reproduction**  
*Compte tenu des données disponibles, les critères de classification ne sont pas remplis.*
- **Toxicité spécifique pour certains organes cibles - exposition unique**  
*Peut irriter les voies respiratoires.*
- **Toxicité spécifique pour certains organes cibles - exposition répétée**  
*Compte tenu des données disponibles, les critères de classification ne sont pas remplis.*
- **Danger par aspiration** *Compte tenu des données disponibles, les critères de classification ne sont pas remplis.*

### RUBRIQUE 12: Informations écologiques

- **12.1 Toxicité**
- **Toxicité aquatique:** *Pas d'autres informations importantes disponibles.*
- **12.2 Persistance et dégradabilité** *Pas d'autres informations importantes disponibles.*
- **12.3 Potentiel de bioaccumulation** *Pas d'autres informations importantes disponibles.*
- **12.4 Mobilité dans le sol** *Pas d'autres informations importantes disponibles.*

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- **Autres indications écologiques:**
- **Indications générales:**  
Catégorie de pollution des eaux 1 (D) (Classification propre): peu polluant  
Ne pas laisser le produit, non dilué ou en grande quantité, pénétrer la nappe phréatique, les eaux ou les canalisations.
- **12.5 Résultats des évaluations PBT et VPVB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.
- **12.6 Autres effets néfastes** Pas d'autres informations importantes disponibles.

### RUBRIQUE 13: Considérations relatives à l'élimination

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

### RUBRIQUE 14: Informations relatives au transport

- |  |  |
|--|--|
| · <b>14.5 Dangers pour l'environnement:</b>  | Non applicable.  |
| · <b>14.6 Précautions particulières à prendre par l'utilisateur</b>                                  | Non applicable.  |
| · <b>Segregation groups</b>  | (SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds                  |
| · <b>Stowage Category</b>  | A  |
| · <b>14.7 Transport en vrac conformément à l'annexe II de la convention Marpol et au recueil IBC</b> | Non applicable.  |
| · <b>Indications complémentaires de transport:</b>   |  |
| · <b>ADR</b>   |  |
| · <b>Quantités exceptées (EQ)</b>  | Code: E1<br>Quantité maximale nette par emballage intérieur: 30 ml<br>Quantité maximale nette par emballage extérieur: 1000 ml |
| · <b>IMDG</b>  |  |
| · <b>Excepted quantities (EQ)</b>  | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml               |
| · <b>"Règlement type" de l'ONU:</b>  | néant  |

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### RUBRIQUE 15: Informations relatives à la réglementation

· **15.1 Réglementations/législation particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement**

· **Directive 2012/18/UE**

· **Substances dangereuses désignées - ANNEXE I** Aucun des composants n'est compris.

· **RÈGLEMENT (CE) N° 1907/2006 ANNEXE XVII** Conditions de limitation: 3

· **Directive 2011/65/UE relative à la limitation de l'utilisation de certaines substances dangereuses dans les équipements électriques et électroniques – Annexe II**

Aucun des composants n'est compris.

· **RÈGLEMENT (UE) 2019/1148**

· **Annexe I - PRÉCURSEURS D'EXPLOSIFS FAISANT L'OBJET DE RESTRICTIONS (Valeur limite maximale aux fins de l'octroi d'une licence en vertu de l'article 5, paragraphe 3)**

Aucun des composants n'est compris.

· **Annexe II - PRÉCURSEURS D'EXPLOSIFS DEVANT FAIRE L'OBJET D'UN SIGNALEMENT**

Aucun des composants n'est compris.

· **Règlement (CE) n° 273/2004 relatif aux précurseurs de drogues**

Aucun des composants n'est compris.

· **Règlement (CE) n° 111/2005 fixant des règles pour la surveillance du commerce des précurseurs des drogues entre la Communauté et les pays tiers**

Aucun des composants n'est compris.

· **15.2 Évaluation de la sécurité chimique:** Une évaluation de la sécurité chimique n'a pas été réalisée.

### RUBRIQUE 16: Autres informations

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

· **Acronymes et abréviations:**

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

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Corrosion cutanée/irritation cutanée – Catégorie 2

Eye Irrit. 2: Lésions oculaires graves/irritation oculaire – Catégorie 2

STOT SE 3: Toxicité spécifique pour certains organes cibles (exposition unique) – Catégorie 3



# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 02.09.2022

überarbeitet am: 02.09.2022

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

- **1.1 Produktidentifikator**
- **Handelsname:** Lead Citrate Ready to use
- **Artikelnummer:** 22410, 22410-01
- **UFI:** SMX3-XODX-E008-EHRH
- **1.2 Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird**  
Keine weiteren relevanten Informationen verfügbar.
- **Verwendung des Stoffes / des Gemisches** Laborchemikalien
- **1.3 Einzelheiten zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt**
- **Hersteller/Lieferant:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- Science Services GmbH  
Unterhachinger Str. 75  
81737 München Germany
- Tel: +49(0)89 18 93 668-0  
[safety@scienceservices.de](mailto:safety@scienceservices.de)
- Deutschland: +49 (0)89 19240, 24h Giftnotruf Munchen, [www.toxinfo.org](http://www.toxinfo.org)  
Osterreich: +43 1406 43 43, Gesundheit Osterreich GmbH, 24 h
- **Auskunfteibereich:** 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**



GHS07

Skin Irrit. 2 H315 Verursacht Hautreizungen.  
Eye Irrit. 2 H319 Verursacht schwere Augenreizung.  
STOT SE 3 H335 Kann die Atemwege reizen.

- **2.2 Kennzeichnungselemente**
- **Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008**  
Das Produkt ist gemäß CLP-Verordnung eingestuft und gekennzeichnet.

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· **Gefahrenpiktogramme**

GHS07

· **Signalwort** Achtung· **Gefahrenhinweise**

H315 Verursacht Hautreizungen.

H319 Verursacht schwere Augenreizung.

H335 Kann die Atemwege reizen.

· **Sicherheitshinweise**

P261 Einatmen von Staub/Rauch/Gas/Nebel/Dampf/Aerosol vermeiden.

P280 Schutzhandschuhe / Augenschutz / Gesichtsschutz tragen.

P304+P340 **BEI EINATMEN:** Die Person an die frische Luft bringen und für ungehinderte Atmung sorgen.P305+P351+P338 **BEI KONTAKT MIT DEN AUGEN:** Einige Minuten lang behutsam mit Wasser spülen. Eventuell vorhandene Kontaktlinsen nach Möglichkeit entfernen. Weiter spülen.

P405 Unter Verschluss aufbewahren.

P501 Entsorgung des Inhalts / des Behälters gemäß den örtlichen / regionalen / nationalen / internationalen Vorschriften.

· **2.3 Sonstige Gefahren**· **Ergebnisse der PBT- und vPvB-Beurteilung**· **PBT:** Nicht anwendbar.· **vPvB:** Nicht anwendbar.

### ABSCHNITT 3: Zusammensetzung/Angaben zu Bestandteilen

· **3.2 Chemische Charakterisierung: Gemische**· **Beschreibung:** Gemisch aus nachfolgend angeführten Stoffen mit ungefährlichen Beimengungen.· **Gefährliche Inhaltsstoffe:** entfällt· **Zusätzliche Hinweise:** Der Wortlaut der angeführten Gefahrenhinweise ist dem Abschnitt 16 zu entnehmen.

### ABSCHNITT 4: Erste-Hilfe-Maßnahmen

· **4.1 Beschreibung der Erste-Hilfe-Maßnahmen**· **Nach Einatmen:** Bei Bewusstlosigkeit Lagerung und Transport in stabiler Seitenlage.· **Nach Hautkontakt:** Sofort mit Wasser und Seife abwaschen und gut nachspülen.· **Nach Augenkontakt:**

Augen mehrere Minuten bei geöffnetem Lidspalt unter fließendem Wasser spülen. Bei anhaltenden Beschwerden Arzt konsultieren.

· **Nach Verschlucken:** Bei anhaltenden Beschwerden Arzt konsultieren.· **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.

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### ABSCHNITT 5: Maßnahmen zur Brandbekämpfung

- **5.1 Löschmittel**
- **Geeignete Löschmittel:** Feuerlöschmaßnahmen auf die Umgebung abstimmen.
- **5.2 Besondere vom Stoff oder Gemisch ausgehende Gefahren**  
Keine weiteren relevanten Informationen verfügbar.
- **5.3 Hinweise für die Brandbekämpfung**
- **Besondere Schutzausrüstung:** Keine besonderen Maßnahmen erforderlich.

### ABSCHNITT 6: Maßnahmen bei unbeabsichtigter Freisetzung

- **6.1 Personenbezogene Vorsichtsmaßnahmen, Schutzausrüstungen und in Notfällen anzuwendende Verfahren**  
Nicht erforderlich.
- **6.2 Umweltschutzmaßnahmen:**  
Mit viel Wasser verdünnen.  
Nicht in die Kanalisation/Oberflächenwasser/Grundwasser gelangen lassen.
- **6.3 Methoden und Material für Rückhaltung und Reinigung:**  
Mit flüssigkeitsbindendem Material (Sand, Kieselgur, Säurebinder, Universalbinder, Sägemehl) aufnehmen.  
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**  
Für gute Belüftung/Absaugung am Arbeitsplatz sorgen.  
Aerosolbildung vermeiden.
- **Hinweise zum Brand- und Explosionsschutz:** Keine besonderen Maßnahmen erforderlich.
- **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

- **8.1 Zu überwachende Parameter**
- **Zusätzliche Hinweise zur Gestaltung technischer Anlagen:** Keine weiteren Angaben, siehe Abschnitt 7.
- **Bestandteile mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten:**  
Das Produkt enthält keine relevanten Mengen von Stoffen mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten.
- **Zusätzliche Hinweise:** Als Grundlage dienen die bei der Erstellung gültigen Listen.

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- **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.  
 Berührung mit den Augen und der Haut vermeiden.*
- **Atemschutz:**  
*Bei kurzzeitiger oder geringer Belastung Atemfiltergerät; bei intensiver bzw. längerer Exposition unluftunabhängiges Atemschutzgerät verwenden.*
- **Handschutz:**



Schutzhandschuhe

*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. Da das Produkt eine Zubereitung aus mehreren Stoffen darstellt, ist die Beständigkeit von Handschuhmaterialien nicht vorausberechenbar und muß deshalb vor dem Einsatz überprüft werden.*
- **Durchdringungszeit des Handschuhmaterials**  
*Die genaue Durchbruchzeit ist beim Schutzhandschuhhersteller zu erfahren und einzuhalten.*
- **Augenschutz:**



Dichtschließende Schutzbrille

### ABSCHNITT 9: Physikalische und chemische Eigenschaften

- **9.1 Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften**

- **Allgemeine Angaben**

- **Aussehen:**

<b>Form:</b>	Flüssigkeit
<b>Farbe:</b>	Durchscheinend
<b>Geruch:</b>	Nicht charakteristisch.
<b>Geruchsschwelle:</b>	Nicht bestimmt.

- **pH-Wert bei 20 °C:** 7

- **Zustandsänderung**

<b>Schmelzpunkt/Gefrierpunkt:</b>	0 °C
<b>Siedebeginn und Siedebereich:</b>	100 °C

- **Flammpunkt:** Nicht anwendbar.

- **Entzündbarkeit (fest, gasförmig):** Nicht anwendbar.

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· <b>Zersetzungstemperatur:</b>	Nicht bestimmt.
· <b>Selbstentzündungstemperatur:</b>	Das Produkt ist nicht selbstentzündlich.
· <b>Explosive Eigenschaften:</b>	Das Produkt ist nicht explosionsgefährlich.
· <b>Explosionsgrenzen:</b> Untere:	Nicht bestimmt.
Obere:	Nicht bestimmt.
· <b>Dampfdruck bei 20 °C:</b>	23 hPa
· <b>Dichte bei 20 °C:</b>	1 g/cm <sup>3</sup>
· <b>Relative Dichte</b>	Nicht bestimmt.
· <b>Dampfdichte</b>	Nicht bestimmt.
· <b>Verdampfungsgeschwindigkeit</b>	Nicht bestimmt.
· <b>Löslichkeit in / Mischbarkeit mit Wasser:</b>	Vollständig mischbar.
· <b>Verteilungskoeffizient: n-Octanol/Wasser:</b>	Nicht bestimmt.
· <b>Viskosität:</b> Dynamisch:	Nicht bestimmt.
Kinematisch:	Nicht bestimmt.
· <b>Lösemittelgehalt:</b> Wasser:	97,0 %
VOC (EU)	0,00 %
· <b>Festkörpergehalt:</b>	0,0 %
· <b>9.2 Sonstige Angaben</b>	Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 10: Stabilität und Reaktivität

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

### ABSCHNITT 11: Toxikologische Angaben

- **11.1 Angaben zu toxikologischen Wirkungen**
- **Akute Toxizität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Primäre Reizwirkung:**
- **Ätz-/Reizwirkung auf die Haut**  
Verursacht Hautreizungen.
- **Schwere Augenschädigung/-reizung**  
Verursacht schwere Augenreizung.
- **Sensibilisierung der Atemwege/Haut** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

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- **Zusätzliche toxikologische Hinweise:**
- **CMR-Wirkungen (krebserzeugende, erbgutverändernde und fortpflanzungsgefährdende Wirkung)**
- **Keimzell-Mutagenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Karzinogenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Reproduktionstoxizität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Spezifische Zielorgan-Toxizität bei einmaliger Exposition**  
Kann die Atemwege reizen.
- **Spezifische Zielorgan-Toxizität bei wiederholter Exposition**  
Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Aspirationsgefahr** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

### ABSCHNITT 12: Umweltbezogene Angaben

- **12.1 Toxizität**
- **Aquatische Toxizität:** Keine weiteren relevanten Informationen verfügbar.
- **12.2 Persistenz und Abbaubarkeit** Keine weiteren relevanten Informationen verfügbar.
- **12.3 Bioakkumulationspotenzial** Keine weiteren relevanten Informationen verfügbar.
- **12.4 Mobilität im Boden** Keine weiteren relevanten Informationen verfügbar.
- **Weitere ökologische Hinweise:**
- **Allgemeine Hinweise:**  
Wassergefährdungsklasse 1 (Selbsteinstufung): schwach wassergefährdend  
Nicht unverdünnt bzw. in größeren Mengen in das Grundwasser, in Gewässer oder in die Kanalisation gelangen lassen.
- **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.
- **Empfohlenes Reinigungsmittel:** Wasser, gegebenenfalls mit Zusatz von Reinigungsmitteln.

### ABSCHNITT 14: Angaben zum Transport

- |  |   |
|--|---|
| <b>14.5 Umweltgefahren:</b>  | Nicht anwendbar.  |
| <b>14.6 Besondere Vorsichtsmaßnahmen für den Verwender</b>   | Nicht anwendbar.  |
| <b>Segregation groups</b>  | (SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds |
| <b>Stowage Category</b>  | A   |
| <b>14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens und gemäß IBC-Code</b> Nicht anwendbar. |   |

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· **Transport/weitere Angaben:**

· **ADR**

· **Freigestellte Mengen (EQ)**

Code: E1

Höchste Nettomenge je Innenverpackung: 30 ml

Höchste Nettomenge je Außenverpackung: 1000 ml

· **IMDG**

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **UN "Model Regulation":**

entfällt

### ABSCHNITT 15: Rechtsvorschriften

· **15.1 Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften für den Stoff oder das Gemisch**

· **Richtlinie 2012/18/EU**

· **Namentlich aufgeführte gefährliche Stoffe - ANHANG I** Keiner der Inhaltsstoffe ist enthalten.

· **VERORDNUNG (EG) Nr. 1907/2006 ANHANG XVII** Beschränkungsbedingungen: 3

· **Richtlinie 2011/65/EU zur Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten – Anhang II**

Keiner der Inhaltsstoffe ist enthalten.

· **VERORDNUNG (EU) 2019/1148**

· **Anhang I - BESCHRÄNKTE AUSGANGSSTOFFE FÜR EXPLOSIVSTOFFE (Oberer Konzentrationsgrenzwert für eine Genehmigung nach Artikel 5 Absatz 3)**

Keiner der Inhaltsstoffe ist enthalten.

· **Anhang II - MELDEPFLICHTIGE AUSGANGSSTOFFE FÜR EXPLOSIVSTOFFE**

Keiner der Inhaltsstoffe ist enthalten.

· **Verordnung (EG) Nr. 273/2004 betreffend Drogenausgangsstoffe**

Keiner der Inhaltsstoffe ist enthalten.

· **Verordnung (EG) Nr. 111/2005 zur Festlegung von Vorschriften für die Überwachung des Handels mit Drogenaustauschstoffen zwischen der Gemeinschaft und Drittländern**

Keiner der Inhaltsstoffe ist enthalten.

· **Nationale Vorschriften:**

· **Wassergefährdungsklasse: WGK 1 (Selbsteinstufung):** schwach 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 relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

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*ELINCS: European List of Notified Chemical Substances*  
*CAS: Chemical Abstracts Service (division of the American Chemical Society)*  
*VOC: Volatile Organic Compounds (USA, EU)*  
*PBT: Persistent, Bioaccumulative and Toxic*  
*vPvB: very Persistent and very Bioaccumulative*  
*Skin Irrit. 2: Hautreizende/-ätzende Wirkung – Kategorie 2*  
*Eye Irrit. 2: Schwere Augenschädigung/Augenreizung – Kategorie 2*  
*STOT SE 3: Spezifische Zielorgan-Toxizität (einmalige Exposition) – Kategorie 3*

DE



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

- **1.1 Identificatore del prodotto**
- **Denominazione commerciale:** Lead Citrate Ready to use
- **Articolo numero:** 22410, 22410-01
- **UFI:** SMX3-X0DX-E008-EHRH
- **1.2 Usi identificati pertinenti della sostanza o della miscela e usi sconsigliati**  
Non sono disponibili altre informazioni.
- **Utilizzazione della Sostanza / del Preparato** Prodotti chimici per laboratorio
- **1.3 Informazioni sul fornitore della scheda di dati di sicurezza**
- **Produttore/fornitore:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- **Società Italiana Chimici**  
Via Rio Nell Ellba 140  
00138 Rome, Italy  
Tel: 39 06 8800211  
Fax: 39 30 06 8815313  
Web: [www.sichim.com](http://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**



GHS07

- **Skin Irrit. 2 H315** Provoca irritazione cutanea.
- **Eye Irrit. 2 H319** Provoca grave irritazione oculare.
- **STOT SE 3 H335** Può irritare le vie respiratorie.

- **2.2 Elementi dell'etichetta**
- **Etichettatura secondo il regolamento (CE) n. 1272/2008**  
Il prodotto è classificato ed etichettato conformemente al regolamento CLP.
- **Pittogrammi di pericolo**



GHS07

- **Avvertenza** Attenzione
- **Indicazioni di pericolo**  
H315 Provoca irritazione cutanea.  
H319 Provoca grave irritazione oculare.

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H335 Può irritare le vie respiratorie.

**Consigli di prudenza**

- P261 Evitare di respirare la polvere/i fumi/i gas/la nebbia/i vapori/gli aerosol.
- P280 Indossare guanti / occhiali di protezione / protezione per il viso.
- P304+P340 **IN CASO DI INALAZIONE:** trasportare l'infortunato all'aria aperta e mantenerlo a riposo in posizione che favorisca la respirazione.
- P305+P351+P338 **IN CASO DI CONTATTO CON GLI OCCHI:** sciacquare accuratamente per parecchi minuti. Togliere le eventuali lenti a contatto se è agevole farlo. Continuare a sciacquare.
- P405 Conservare sotto chiave.
- P501 Smaltire il prodotto/recipiente in conformità con le disposizioni locali / regionali / nazionali / internazionali.

**2.3 Altri pericoli**

**Risultati della valutazione PBT e vPvB**

- **PBT:** Non applicabile.
- **vPvB:** Non applicabile.

### SEZIONE 3: Composizione/informazioni sugli ingredienti

- **3.2 Caratteristiche chimiche: Miscela**
- **Descrizione:** Miscela delle seguenti sostanze con additivi non pericolosi.
- **Sostanze pericolose:** non applicabile
- **Ulteriori indicazioni:** Il testo dell'avvertenza dei pericoli citati può essere appreso dal capitolo 16

### SEZIONE 4: Misure di primo soccorso

- **4.1 Descrizione delle misure di primo soccorso**
- **Inalazione:** Se il soggetto è svenuto provvedere a tenerlo durante il trasporto in posizione stabile su un fianco.
- **Contatto con la pelle:** Lavare immediatamente con acqua e sapone sciacquando accuratamente.
- **Contatto con gli occhi:**  
Lavare con acqua corrente per diversi minuti tenendo le palpebre ben aperte. Se persiste il dolore consultare il medico.
- **Ingestione:** Se il dolore persiste consultare il medico.
- **4.2 Principali sintomi ed effetti, sia acuti che ritardati** Non sono disponibili altre informazioni.
- **4.3 Indicazione dell'eventuale necessità di consultare immediatamente un medico e di trattamenti speciali**  
Non sono disponibili altre informazioni.

### SEZIONE 5: Misure antincendio

- **5.1 Mezzi di estinzione**
- **Mezzi di estinzione idonei:** Adottare provvedimenti antiincendio nei dintorni della zona colpita.
- **5.2 Pericoli speciali derivanti dalla sostanza o dalla miscela** Non sono disponibili altre informazioni.
- **5.3 Raccomandazioni per gli addetti all'estinzione degli incendi**
- **Mezzi protettivi specifici:** Non sono richiesti provvedimenti particolari.

### 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:**  
Diluire abbondantemente con acqua.  
Impedire infiltrazioni nella fognatura/nelle acque superficiali/nelle acque freatiche.

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- **6.3 Metodi e materiali per il contenimento e per la bonifica:**  
Raccogliere il liquido con materiale assorbente (sabbia, tripoli, legante di acidi, legante universale, segatura).  
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 ventilazione/aspirazione nei luoghi di lavoro.  
Evitare la formazione di aerosol.
- **Indicazioni in caso di incendio ed esplosione:** Non sono richiesti provvedimenti particolari.
- **7.2 Condizioni per lo stoccaggio sicuro, comprese eventuali incompatibilità**
- **Stoccaggio:**
- **Requisiti dei magazzini e dei recipienti:** Non sono richiesti requisiti particolari.
- **Indicazioni sullo stoccaggio misto:** Non necessario.
- **Ulteriori indicazioni relative alle condizioni di immagazzinamento:** Mantenere i recipienti ermeticamente chiusi.
- **7.3 Usi finali particolari** Non sono disponibili altre informazioni.

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

- **8.1 Parametri di controllo**
- **Ulteriori indicazioni sulla struttura di impianti tecnici:** Nessun dato ulteriore, vedere punto 7.
- **Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:**  
Il prodotto non contiene quantità rilevanti di sostanze i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro.
- **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.  
Evitare il contatto con gli occhi e la pelle.
- **Maschera protettiva:**  
Nelle esposizioni brevi e minime utilizzare la maschera; nelle esposizioni più intense e durature indossare l'autorespiratore.
- **Guanti protettivi:**



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.

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· **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. Poiché il prodotto rappresenta una formulazione di più sostanze, la stabilità dei materiali dei guanti non è calcolabile in anticipo e deve essere testata prima dell'impiego

· **Tempo di permeazione del materiale dei guanti**

Richiedere dal fornitore dei guanti il tempo di passaggio preciso il quale deve essere rispettato.

· **Occhiali protettivi:**

Occhiali protettivi a tenuta

### SEZIONE 9: Proprietà fisiche e chimiche

· **9.1 Informazioni sulle proprietà fisiche e chimiche fondamentali**· **Indicazioni generali**· **Aspetto:**

**Forma:** Liquido

**Colore:** Traslucido

· **Odore:** Non caratteristico.

· **Soglia olfattiva:** Non definito.

· **valori di pH a 20 °C:** 7

· **Cambiamento di stato**

**Punto di fusione/punto di congelamento:** 0 °C

**Punto di ebollizione iniziale e intervallo di ebollizione:** 100 °C

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

· **Infiammabilità (solidi, gas):** Non applicabile.

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

· **Temperatura di autoaccensione:** Prodotto non autoinfiammabile.

· **Proprietà esplosive:** Prodotto non esplosivo.

· **Limiti di infiammabilità:**

**Inferiore:** Non definito.

**Superiore:** Non definito.

· **Tensione di vapore a 20 °C:** 23 hPa

· **Densità a 20 °C:** 1 g/cm<sup>3</sup>

· **Densità relativa:** Non definito.

· **Densità di vapore:** Non definito.

· **Velocità di evaporazione:** Non definito.

· **Solubilità in/Miscibilità con acqua:**

Completamente miscibile.

· **Coefficiente di ripartizione: n-ottanolo/acqua:** Non definito.

· **Viscosità:**

**Dinamica:** Non definito.

**Cinematica:** Non definito.

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<b>· Tenore del solvente:</b>	
Acqua:	97,0 %
VOC (CE)	0,00 %
<b>Contenuto solido:</b>	
	0,0 %
<b>· 9.2 Altre informazioni</b>	Non sono disponibili altre informazioni.

### SEZIONE 10: Stabilità e reattività

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

### SEZIONE 11: Informazioni tossicologiche

- **11.1 Informazioni sugli effetti tossicologici**
- **Tossicità acuta** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Irritabilità primaria:**
- **Corrosione/irritazione cutanea**  
Provoca irritazione cutanea.
- **Lesioni oculari gravi/irritazioni oculari gravi**  
Provoca grave irritazione oculare.
- **Sensibilizzazione respiratoria o cutanea**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Ulteriori dati tossicologici:**
- **Effetti CMR (cancerogenicità, mutagenicità e tossicità per la riproduzione)**
- **Mutagenicità delle cellule germinali**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Cancerogenicità** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità per la riproduzione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità specifica per organi bersaglio (STOT) - esposizione singola**  
Può irritare le vie respiratorie.
- **Tossicità specifica per organi bersaglio (STOT) - esposizione ripetuta**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Pericolo in caso di aspirazione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

### SEZIONE 12: Informazioni ecologiche

- **12.1 Tossicità**
- **Tossicità acquatica:** Non sono disponibili altre informazioni.
- **12.2 Persistenza e degradabilità** Non sono disponibili altre informazioni.
- **12.3 Potenziale di bioaccumulo** Non sono disponibili altre informazioni.
- **12.4 Mobilità nel suolo** Non sono disponibili altre informazioni.
- **Ulteriori indicazioni in materia ambientale:**
- **Ulteriori indicazioni:**  
Pericolosità per le acque classe 1 (D) (Autoclassificazione): poco pericoloso

(continua a pagina 6)

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

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**Denominazione commerciale:** Lead Citrate Ready to use

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- Non immettere nelle acque freatiche, nei corsi d'acqua o nelle fognature non diluito o in grandi quantità.
- **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.
- **Detergente consigliato:** Acqua eventualmente con l'aggiunta di detersivi.

### SEZIONE 14: Informazioni sul trasporto

- |   |  |
|---|--|
| · <b>14.5 Pericoli per l'ambiente:</b>  | Non applicabile.   |
| · <b>14.6 Precauzioni speciali per gli utilizzatori</b>                             | Non applicabile.   |
| · <b>Segregation groups</b>   | (SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds                  |
| · <b>Stowage Category</b>   | A  |
| · <b>14.7 Trasporto di rinfuse secondo l'allegato II di MARPOL ed il codice IBC</b> | Non applicabile.   |
| · <b>Trasporto/ulteriori indicazioni:</b>   |  |
| · <b>ADR</b>  |  |
| · <b>Quantità esenti (EQ)</b>   | Codice: E1<br>Quantità massima netta per imballaggio interno: 30 ml<br>Quantità massima netta per imballaggio esterno: 1000 ml |
| · <b>IMDG</b>   |  |
| · <b>Excepted quantities (EQ)</b>   | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml               |
| · <b>UN "Model Regulation":</b>   | non applicabile  |

### SEZIONE 15: Informazioni sulla regolamentazione

- **15.1 Disposizioni legislative e regolamentari su salute, sicurezza e ambiente specifiche per la sostanza o la miscela**
- **Direttiva 2012/18/UE**
- **Sostanze pericolose specificate - ALLEGATO I** Nessuno dei componenti è contenuto.
- **REGOLAMENTO (CE) n. 1907/2006 ALLEGATO XVII** Restrizioni: 3
- **Direttiva 2011/65/UE sulla restrizione dell'uso di determinate sostanze pericolose nelle apparecchiature elettriche ed elettroniche - Allegato II**
- Nessuno dei componenti è contenuto.

(continua a pagina 7)

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

Stampato il: 02.09.2022

Revisione: 02.09.2022

**Denominazione commerciale: Lead Citrate Ready to use**

(Segue da pagina 6)

· **REGOLAMENTO (UE) 2019/1148**

· **Allegato I - PRECURSORI DI ESPLOSIVI SOGGETTI A RESTRIZIONI (Valore limite superiore ai fini della concessione di licenze a norma dell'articolo 5, paragrafo 3)**

Nessuno dei componenti è contenuto.

· **Allegato II - PRECURSORI DI ESPLOSIVI SOGGETTI A SEGNALAZIONE**

Nessuno dei componenti è contenuto.

· **Regolamento (CE) n. 273/2004 relativo ai precursori di droghe**

Nessuno dei componenti è contenuto.

· **Regolamento (CE) N. 111/2005 recante norme per il controllo del commercio dei precursori di droghe tra la Comunità e i paesi terzi**

Nessuno dei componenti è contenuto.

· **15.2 Valutazione della sicurezza chimica: Una valutazione della sicurezza chimica non è stata effettuata.**

### **SEZIONE 16: Altre informazioni**

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

· **Abbreviazioni e acronimi:**

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

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Corrosione/irritazione della pelle – Categoria 2

Eye Irrit. 2: Gravi lesioni oculari/irritazione oculare – Categoria 2

STOT SE 3: Tossicità specifica per organi bersaglio (esposizione singola) – Categoria 3

# 물질안전보건자료 GHS에 따라라따

인쇄일자: 2022.09.02

개정: 2022.09.02

## 1 화학제품과 회사에 관한 정보

### 제품제품제명

· **제품명:** Lead Citrate Ready to use

· **상품번호:** 22410, 22410-01

해당 해당 물질이나 혼합물(또는 관련 화합물)의 용도 및 사용 금지 용도

· **제품의 권고 용도와 사용 용도에 대한 제한** Lead Citrate Ready to use

· **제품의 권고 용도와 사용 용도에 대한 제한** 시험실 화학품

· **안전데이터표(Safety Data Sheet) 내 공급업체 관련 정보**

· **제조사/수입자/유통업체 정보**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

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

email: info@emsdiasum.com

www.emsdiasum.com

Samchang Commercial Co., Ltd.

Yeo Eui Do

PO Box 1110

Seoul, Korea

Tel: 82 2 703 3040

Fax: 82 2 717 3298

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Daedok Science, Co. Ltd.

34141 E10 Korea Advanced Institute of Science

Guseong-Dong, Yuseong-gu, Daejeon,

Korea

Phone: 82 42 710 2091

Fax: 82 42 367 0005

Website: www.labsmro.com

· **추가적인 정보** 제품 특성 등 취급 가능 product safety department

· **비상연락 전화번호:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

## 2 유해성·위험성

· **순물질 또는 혼합물(또는) 분류분류**



피부 부식성/피부 자극성 - 구분2 H315 피부에 자극을 일으킴

심한 눈 손상성/눈 자극성 - 구분2A H319 눈에 심한 자극을 일으킴

특정표적장기 독성 - 1회 노출 - 구분3 H335 호흡기 자극을 일으킬 수 있음

· **라벨표기 요소요소**

· **라벨표기 요소**

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

(2 쪽에 계속)





# 물질안전보건자료 GHS에 따라라따

인쇄일자: 2022.09.02

개정: 2022.09.02

**제품명:** Lead Citrate Ready to use

(2 쪽부터계속)

## 6 누출 사고 시 대처방법

- 개인적 예방조치, 보호장비 및 응급 처치 절차 필요 없음.
- 환경 오염 방지 대책:
  - 많은 물로 희석 시킨다.
  - 하수도망/해수면위의물/지하수로도달하지않게한다.
- 밀폐 밀폐 용기 및 화학 정보에 소재 소재
  - 액체가 혼합된 물질 (모래, 규 조 토, 산 성 결 합 물, 일 반 결 합 물, 톱 밥)에 흡입되도록 한다.
  - 충분한 환기가 되도록 한다.
- 식수 섭취 제한
  - 안전 관 리에 대 한 정 보 는 제 7 장 을 참 고 하 시 오.
  - 개 인 보 호 장 비에 대 한 정 보 는 제 8 장 을 참 고 하 시 오.
  - 쓰 레 기 처 리에 대 한 정 보 는 제 13 장 을 참 고 하 시 오.

## 7 취급 및 저장방법

- 취급 취급 취급
- 안전 안전 취급을 위한 예방 조치
  - 작업장에서는 통풍이 잘 되고/습기 제거가 잘 되게 주의한다.
  - 연무질이 형성되는 것을 피한다.
- 화재 화재를 예방하고 예방 대책에 관한 정보 별 한 조 치 가 필 요 없 음.
- 혼합 위험성 및 안정성 조건 조건
  - 보관 보관 보관
  - 안전 상 저장 방법 별 한 요 구 사 항 이 없 음.
  - 하 나 의 공 통 공 관 보 호 장 비에 대 한 보 호 장 비에 관 한 정 보 없 음
  - 보 관 조 건 에 관 한 주 가 정 보 정 보 기 를 새 지 않 게 밀 폐 한 채 보 관 한 다.
  - 구 체 적 최 종 최 종 자 주 가 적 인 정 보 가 존 재 하 지 않 습 니 다.

## 8 노출방지 및 개인보호구

- 첨단 시설 디자인에 대한 추가 정보: 더 이상 의 자 료 는 없 음. 항 목 7 을 참 고 하 시 오.
- 통제 통제 통제 변수
  - 화학 물질의 노출 기준, 생물학적 노출 기준 등:
    - 본 제품에는 작업장에서 감시가 필요한 주요한 가치의 어떤 해당 재료의 양을 함유하고 있지 않다.
    - 추가 정보 정보 조 할 당 시 에 유 효 한 목 록 을 기 초 로 사 용 했 다.
- 노출 통제 통제 통제
  - 개인 개인 개인 보호 구
    - 일반적 보호 조치 및 위생 조치:
      - 식료품, 음료수와 사료로부터 멀리 떨어져 두는 다.
      - 더러워진거나 음료가 묻은 옷은 즉시 탈의한다.
      - 휴식 전 이 나 작 업 이 끝 날 때 마 다 손 을 씻 는 다.
      - 눈 과 피 부 와 의 접 촉 은 피 한 다.
    - 호흡기 보호 보호
      - 단 시 간 또 는 경 미 한 오 염 의 경 우 에 는 호 흡 여 과 기 를 사 용 한 다. 심 각 한 또 는 장 기 간 노 출 시 에 는 호 흡 보 호 장 비 를 사 용 한 다.
    - 보 호 보 호 보 호



보호용 장갑

(4 쪽에 계속)

# 물질안전보건자료 GHS에 따라라따

인쇄일자: 2022.09.02

개정: 2022.09.02

**제품명: Lead Citrate Ready to use**

(3 쪽부터계속)

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

**· 장갑 의재로**

적합한장갑의선정은재질차이뿐아니라품질기준의차이도고려하여이루어져야하고제조업종에따라서도다르게선정되어야한다. 제품은다양한재료로부터의조제로이루어지는것이기때문에, 장갑재질의안정성은사전에예측되어질수있는것이아니고, 반드시사용전에 (그안전성이) 체크되어야한다.

· 장갑 재료의 투과시간 정확한관통시간은보호장갑제조자에의하여인지되고, 준수되어야한다.  
보호보호보호



꼭조이는보안경

## 9 물리화학적 특성

기본 물리화학적 특성에 대한 정보

**· 일반정보**

외형외형외형

· 물리적 상태상 태 액체  
· 색: 투명한  
· 냄새냄새냄새 특색없는  
· 후각역치 알맞지않다.

· pH 의경우 20 °C: 7

**· 상태변화**

· 녹는점/어는점: 0 °C  
초기초기 녹는 점과 끓는점범위범위100 °C

· 인화점: 해당사항 없음.

· 인화성고체기체해체해체해체 해당사항 없음.

분해분해온도

알맞지않다.

· 자기점화: 이제품은자연발화성이없다.

· 폭발위험: 이제품은폭발위험성이없다

인화 안전 인화점 폭발 위험성 상한선 하한

· 아래로: 알맞지않다.  
· 위로위로위로 알맞지않다.

· 증기압 의경우 20 °C: 23 hPa

밀도밀도 밀도경우 20 °C:

1 g/cm<sup>3</sup>

비중비중비중

알맞지않다.

· 증기밀도:

알맞지않다.

증발 증발 증발 속도

알맞지않다.

**· 용해도:**

· 물: 완전히혼합할수있는

· n 옥탄올/물 분배계수: 알맞지않다.

점도점도점도

· 역확성: 알맞지않다.

(5 쪽에계속)

# 물집안전보건자료 GHS에 따라 라다

인쇄일자: 2022.09.02

개정: 2022.09.02

**제품명:** Lead Citrate Ready to use

(4 쪽부터 계속)

<b>등점성:</b>	알맞지않다.
<b>· 용매내용물</b>	
물:	97.0 %
VOC (EU)	0.00 %
<b>고체양함량함량</b>	0.0 %
기타 정보	추가적인 정보가 존재하지 않습니다.

## 10 안정성 및 반응성

- 반응성 추가적인 정보가 존재하지 않습니다.
- 화학적 안정성
- 화학적 안정성 유해 반응의 가능성 / 피해야할 조건에 따라 사용 할 경우 해체는 없다
- 유해반응 가능성 위험한 반응으로는 알려지지 않았다.
- 피해야할 조건에 대한 추가적인 정보가 존재하지 않습니다.
- 혼합 유해분해물: 추가적인 정보가 존재하지 않습니다.
- 유해분해물질: 위험성 있는 분해물들은 알려지지 않았다.

## 11 독성에 관한 정보

- 독성학적 영향에 대한 정보
- 급성 독성 독성
- 일차적 자극 효과
- 피부 피부 부식성 또는 자극성: 피부와 점막을 자극한다.
- 심한 심한 부식성 또는 자극성: 자극
- 감각화: 민감한 영향이 없는 것으로 알려져 있다.
- 추가적인 독성에 관한 정보
- 이제 제품은 유럽 공동체의 공동 분류 원칙의 합법적인 절차에 근거하여 최근에 발효된 원고에서 아래 위험들의 의사전 준비에 대하여 제시하고 있다.
- 자극적인

## 12 환경에 미치는 영향

- 독성 독성 독성
- 수생 독성: 추가적인 정보가 존재하지 않습니다.
- 지속성 및 분해성 추가적인 정보가 존재하지 않습니다.
- 환경 시스템에서의 행동:
- 생물농축 잠재성 추가적인 정보가 존재하지 않습니다.
- 토양내 이동성 추가적인 정보가 존재하지 않습니다.
- 추가적인 생태학 정보
- 일반 열안정성 특징
- 수질오염등급 1 (자체등급분류): 약하게 수질오염이된
- 회색 시키지 않은 채 대량으로 지하시나, 하천으로 그리고 하수도망에 도달하지 않게 한다.
- PBT(잔류성, 생물농축성, 물집물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과
- PBT(잔류성, 생물농축성, 물집물질) 당사항 없음.
- vPvB(고 잔류성, 고 생물농축성 물질) 당사항 없음.
- 기타 기타 부속용 추가적인 정보가 존재하지 않습니다.

# 물질안전보건자료 GHS에 따라 라다

인쇄일자: 2022.09.02

개정: 2022.09.02

**제품명:** Lead Citrate Ready to use

(5 쪽부터 계속)

## 13 폐기시 주의사항

- 폐기물 처리 방법  
권고 권고 규격의 쓰레기와 함께 처리되어서는 안 된다. 하수도망으로 유입되어서는 안 된다.
- 비위생적 포장 포장  
권고 권고 규격의 지침에 입각한 쓰레기 처리.
- 추천 세정제: 경우에 따라서 세제가 첨가된 물

## 14 운송에 필요한 정보

· 환경적 유해물질:	해당사항 없음.
· 이물질 특별 배합 조치 · Segregation groups	해당사항 없음. (SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds
· Stowage Category	A
· MARPOL 73/78(선박으로부터의 해양오염방지협약) 부속서 2 및 IBC Code(국제선적화물코드)에 따른 벌크 배합 운송 운송	해당사항 없음.
· 운송/추가 정보	
· ADR · Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· IMDG · Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· IBC Code에 따른 벌크 배합 운송 운송	누락되다

## 15 법적 규제 현황

· 산업안전보건법에 의한 유해물질 규제	
· 제조제 조제 금지 물질:	
어떠한 내용물도 목록화되어 있지 않다	
· 허가대상 물질:	
어떠한 내용물도 목록화되어 있지 않다	
· 관리대상 유해물질:	
어떠한 내용물도 목록화되어 있지 않다	
· 작업환경 측정 대상 유해인자	
어떠한 내용물도 목록화되어 있지 않다	
· 특수건강 진단 대상 유해인자	
어떠한 내용물도 목록화되어 있지 않다	

해당 해당 물질 또는 혼합물에 대한 유해물질 정보에 관한 정보가 존재하지 않습니다.

(7 쪽에 계속)

# 물질안전보건자료 GHS에 따라라따

인쇄일자: 2022.09.02

개정: 2022.09.02

**제품명: Lead Citrate Ready to use**

(6 쪽부터계속)

· <b>Korean Existing Chemical Inventory</b>		
7732-18-5	물	KE-35400
7440-54-2	gadolinium	KE-05-0661

· **화학물질관리법**  
· **사고대비물질**  
어떠한내용물도목록화되어있지않다

· **금지물질**  
어떠한내용물도목록화되어있지않다

· **제한물질**  
어떠한내용물도목록화되어있지않다

· **유독물질**  
어떠한내용물도목록화되어있지않다

· **허가물질**  
어떠한내용물도목록화되어있지않다

**등록물질**  
7732-18-5 물

· **‘21년까지 등록하여야 할 압, 돌연변이, 생식능력 이상을 일으키거나 일으킬 우려가 있는 물질**  
어떠한내용물도목록화되어있지않다

· **중점관리물질(제관전관련관련)**  
어떠한내용물도목록화되어있지않다

· **GHS 그림문자**  
본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.



GHS07

· **신호어 경고**  
**유해**  
피부에 자극을 일으킴  
눈에 심한 자극을 일으킴  
호흡기 자극을 일으킬 수 있음

· **예방조치문구**  
분진·흙·가스·미스트·증기·스프레이의 흡입을 피하십시오.  
보호장갑 / 눈 보호대 / 안면 보호구 착용.  
흡입하면 신선한 공기가 있는 곳으로 옮기고 호흡하기 쉬운 자세로 안정을 취하십시오.  
눈에 묻으면 몇 분간 물로 조심해서 씻으십시오. 가능하면 콘택트렌즈를 제거하십시오. 계속 씻으십시오.  
밀봉하여 저장하십시오.  
(지방/지역/국가/국제 규정에 따라) 에 내용물/용기를 폐기하십시오.

· **화학물질 안전성 평가**  
화학물질 안전성 평가가 수행되지 않음

## 16 그 밖의 참고사항

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

(8 쪽에 계속)

# 물질안전보건자료

## GHS에 따라라따

인쇄일자: 2022.09.02

개정: 2022.09.02

**제품명: Lead Citrate Ready to use**

(7 쪽부터계속)

· 담당자:  
최초 최초 작성 일자: 2022.09.02  
개정 개정 개수: 1 / 최종 개정 일자: 1 / 2022.09.02

· 약어와 두문자어:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
VOC: Volatile Organic Compounds (USA, EU)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

KR

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

Tarikh cetak 02.09.2022

Disemak semula pada 02.09.2022

## 1 Pengenalan bahan kimia berbahaya dan pembekal

- **Pengenal pasti produk**
- **Nama dagang:** Lead Citrate Ready to use
- **Nombor artikel:** 22410, 22410-01
- **Kegunaan yang disarankan bagi bahan dan sekatan penggunaan** Tiadak maklumat lanjut yang diperoleh.
- **Penggunaan bahan/sediaan** Bahan kimia makmal
- **Perincian pembekal risalah data keselamatan**
- **Pengilang/Pembekal:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- **Maklumat lanjut dapat diperoleh daripada:** Product safety department
- **Nombor telefon kecemasan:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Pengenalan bahaya

- **Pengelasan bahan atau campuran**



Kreng. Kulit 2 H315 Menyebabkan kerengsaan kulit.  
Kreng. Mata 2 H319 Menyebabkan kerengsaan mata yang serius.  
STOT SE 3 H335 Boleh menyebabkan kerengsaan pernafasan.

- **Melabelkan unsur**
- **Unsur label GHS** Produk ini dikelaskan dan dilabelkan menurut Sistem Terharmoni Global (GHS).
- **Piktogram bahaya**



GHS07

- **Kata isyarat Amaran**
- **Pernyataan Bahaya**  
Menyebabkan kerengsaan kulit.  
Menyebabkan kerengsaan mata yang serius.  
Boleh menyebabkan kerengsaan pernafasan.
- **Pernyataan Berjaga-jaga**  
Elakkan daripada tersedut habuk/wasap/gas/kabus/wap/semburan.  
Pakai sarung tangan pelindung / perlindungan mata / perlindungan muka.  
**JIKA TERKENA MATA:** Bilas berhati-hati dengan air selama beberapa minit. Tanggalkan kanta lekap, jika ada dan dapat dilakukan dengan mudah. Teruskan membilas.  
Tanggalkan pakaian tercemar dan basuh sebelum menggunakannya semula.  
Simpan di tempat berkunci.  
Lupuskan kandungan/bekas menurut peraturan tempatan/wilayah/kebangsaan/antarabangsa.

(Bersambung ke halaman 2)



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

Tarikh cetak 02.09.2022

Disemak semula pada 02.09.2022

**Nama dagang: Lead Citrate Ready to use**

(Sambungan halaman 1)

- **Bahaya lain**
- **Keputusan penilaian PBT dan vPvB**
- **PBT:** Tidak berkekaan
- **vPvB:** Tidak berkekaan

### 3 Komposisi dan maklumat mengenai ramuan bahan kimia berbahaya

- **Ciri kimia: Campuran**
- **Keterangan:** Campuran bahan disenaraikan di bawah bersama dengan bahan tambah tidak berbahaya.
- **Komponen berbahaya :** Tidak sah

### 4 Langkah-langkah pertolongan cemas

- **Keterangan langkah pertolongan cemas**
- **Jika tersedut:**  
Jika mangsa tidak sedarkan diri, letakkan pesakit dengan stabil dalam kedudukan mengiring untuk diangkat.
- **Jika terkena kulit:** Segera basuh dengan air dan sabun serta bilas bersih-bersih.
- **Jika terkena mata:**  
Bilas mata sambil membukanya di bawah air yang mengalir selama beberapa minit. Jika gejala berterusan, hubungi doktor.
- **Jika tertelan:** Jika gejala berterusan, hubungi doktor.
- **Maklumat untuk doktor:**
- **Gejala dan kesan paling penting, akut dan lewat** Tiada maklumat lanjut yang diperolehi.
- **Arahan bagi apa-apa rawatan perubatan dan rawatan khas yang diperlukan**  
Tiada maklumat lanjut yang diperolehi.

### 5 Langkah-langkah pepadaman kebakaran

- **Bahan pepadam api**
- **Agan pepadam yang sesuai:** Gunakan kaedah pepadaman kebakaran yang sesuai dengan keadaan sekeliling.
- **Bahaya khusus yang timbul daripada bahan atau campuran** Tiada maklumat lanjut yang diperolehi.
- **Panduan kepada pepadam kebakaran**
- **Kelengkapan perlindungan:** Tiada langkah khusus diperlukan.

### 6 Langkah-langkah pelepasan tidak sengaja

- **Langkah perlindungan diri, kelengkapan pelindung dan prosedur kecemasan** Tidak diperlukan.
- **Langkah perlindungan alam sekitar:**  
Cairkan dengan air yang banyak.  
Jangan biarkannya memasuki pembentung/air permukaan atau tanah.
- **Kaedah dan bahan untuk pembendungan dan pembersihan:**  
Serap dengan bahan cecair pengikat (pasir, diatomit, pengikat asid, pengikat semesta, habuk papan)  
Pastikan pengalihudaraan mencukupi.
- **Rujukan ke bahagian lain**  
Lihat Bahagian 7 untuk maklumat pengendalian yang selamat.  
Lihat Bahagian 8 untuk maklumat kelengkapan perlindungan diri.  
Lihat Bahagian 13 untuk maklumat pelupusan.

MY

(Bersambung ke halaman 3)

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

Tarikh cetak 02.09.2022

Disemak semula pada 02.09.2022

**Nama dagang: Lead Citrate Ready to use**

(Sambungan halaman 2)

### 7 Pengendalian dan penyimpanan

- **Pengendalian:**
- **Langkah perlindungan untuk pengendalian selamat**  
Pastikan pengalihudaraan/ekzos yang mencukupi di tempat kerja.  
Elakkan pembentukan aerosol.
- **Maklumat kebakaran dan perlindungan daripada letupan:** Tiada langkah berjaga-jaga yang khusus diperlukan.
- **Keadaan untuk penyimpanan selamat, termasuk apa-apa ketakserasian**
- **Penyimpanan:**
- **Keperluan yang mesti dipenuhi oleh bilik stor dan ruang simpanan.** Tiada keperluan khusus.
- **Maklumat penyimpanan di dalam satu tempat penyimpanan yang biasa:** Tidak diperlukan.
- **Maklumat lanjut tentang syarat penyimpanan:** Pastikan bekas sentiasa bertutup rapat.
- **Kegunaan akhir yang khusus** Tiada maklumat lanjut yang diperoleh.

### 8 Kawalan pendedahan dan perlindungan diri

- **Maklumat tambahan tentang reka bentuk kemudahan teknikal:** Tiada maklumat lanjut, lihat perkara 7.
- **Parameter kawalan**
- **Ramuan dengan nilai had yang memerlukan pemantauan di tempat kerja:**  
Produk tidak mengandungi sebarang kuantiti bahan yang berkaitan dengan nilai kritikal yang perlu dipantau di tempat kerja.
- **Maklumat tambahan:** Senarai yang sah semasa pembuatan digunakan sebagai asas.
- **Kawalan pendedahan**
- **Kelengkapan perlindungan diri:**
- **Langkah perlindungan dan kebersihan am:**  
Jauhkan daripada makanan, minuman dan makanan haiwan.  
Segera tanggalkan semua pakaian yang tercemar dan kotor.  
Basuh tangan sebelum berhenti rehat dan apabila kerja selesai.  
Elakkan daripada terkena mata dan kulit.
- **Perlindungan pernafasan:**  
Jika berlaku pendedahan sekejap atau sedikit pencemaran, gunakan alat penapis pernafasan. Jika berlaku pendedahan yang intensif atau berpanjangan, gunakan alat pernafasan perlindungan serba lengkap.
- **Perlindungan tangan:**



Sarung tangan pelindung.

Bahan sarung tangan hendaklah telus dan kalis terhadap produk/bahan/sediaan.

Oleh sebab tiada ujian yang dijalankan, maka tiada syor bagi bahan sarung tangan yang boleh diberikan untuk produk/sediaan/campuran kimia.

Pemilihan bahan sarung tangan berdasarkan waktu penembusan, kadar pembauran dan degradasi.

- **Bahan sarung tangan**

Pemilihan sarung tangan yang sesuai bukan hanya bergantung pada bahannya, tetapi juga tanda kualiti lainnya serta perbezaannya daripada satu pengeluar dengan pengeluar yang lain. Memandangkan produk merupakan suatu sediaan daripada beberapa bahan, ketahanan bahan sarung tangan tidak boleh dipastikan terlebih dahulu, oleh itu sarung tangan hendaklah diperiksa sebelum digunakan.

- **Jangka masa penyerapan bahan sarung tangan**

Waktu kemunculan yang tepat hendaklah diperoleh pengeluar sarung tangan pelindung dan hendaklah dipatuhi.

(Bersambung ke halaman 4)

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

Tarikh cetak 02.09.2022

Disemak semula pada 02.09.2022

Nama dagang: *Lead Citrate Ready to use*

(Sambungan halaman 3)

· **Perlindungan mata:**

Gogal bertutup rapat

### 9 Sifat fizikal dan kimia

· <b>Maklumat tentang ciri fizik dan kimia</b>	
· <b>Maklumat Am</b>	
· <b>Rupa:</b>	
<i>Bentuk:</i>	<i>Cecair</i>
<i>Warna:</i>	<i>Lut sinar</i>
· <b>Bau:</b>	<i>Tanpa ciri</i>
· <b>Ambang bau</b>	<i>Tidak ditentukan.</i>
· <b>Nilai pH pada 20 °C:</b>	<i>7</i>
· <b>Perubahan pada keadaan</b>	
<i>Takat lebur/takat beku</i>	<i>0 °C</i>
<i>Takat didih awal dan julat didih</i>	<i>100 °C</i>
· <b>Takat kilat:</b>	<i>Tidak berkenaan</i>
· <b>Kemudahbakaran (pepejal, gas)</b>	<i>Tidak berkenaan</i>
· <b>Suhu penguraian:</b>	<i>Tidak ditentukan.</i>
· <b>Suhu pengautocucuhan</b>	<i>Produk tidak terucuh sendiri</i>
· <b>Bahaya letupan:</b>	<i>Produk tidak ada bahaya letupan.</i>
· <b>Had letupan :</b>	
<i>Bawah:</i>	<i>Tidak ditentukan.</i>
<i>Atas:</i>	<i>Tidak ditentukan.</i>
· <b>Tekanan wap pada 20 °C:</b>	<i>23 hPa</i>
· <b>Ketumpatan pada 20 °C:</b>	<i>1 g/cm<sup>3</sup></i>
· <b>Ketumpatan bandingan</b>	<i>Tidak ditentukan.</i>
· <b>Ketumpatan wap</b>	<i>Tidak ditentukan.</i>
· <b>Kadar penyejatan</b>	<i>Tidak ditentukan.</i>
· <b>Keterlarutan dalam / Keterlarutcampuran dengan</b>	
<i>Air:</i>	<i>Terlarut campur sepenuhnya.</i>
· <b>Pekali sekatan: n-oktanol/air</b>	<i>Tidak ditentukan.</i>
· <b>Kelikatan:</b>	
<i>Dinamik:</i>	<i>Tidak ditentukan.</i>
<i>Kinematik:</i>	<i>Tidak ditentukan.</i>
· <b>Kandungan pelarut:</b>	
<i>Air:</i>	<i>97.0 %</i>
<i>Kandungan pepejal:</i>	<i>0.0 %</i>

(Bersambung ke halaman 5)

MY

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

Tarikh cetak 02.09.2022

Disemak semula pada 02.09.2022

Nama dagang: *Lead Citrate Ready to use*

(Sambungan halaman 4)

· **Maklumat lain**

Tiada maklumat lanjut yang diperoleh.

### 10 Kestabilan dan kereaktifan

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

### 11 Maklumat toksikologi

- **Maklumat tentang kesan toksikologi**
- **Ketoksikan akut:**
- **Kesan kerengsaan primer:**
- **Kakisan atau kerengsaan kulit** Merengsa kepada kulit dan mukus membran.
- **Kerosakan atau kerengsaan mata yang serius** Kesan merengsa.
- **Pemekaan pernafasan / kulit** Tiada kesan pemekaan yang diketahui.
- **Maklumat tambahan toksikologi:**  
Produk menunjukkan bahaya berikut mengikut kaedah pengiraan Garis Panduan Pengelasan Am EU bagi Sediaan seperti yang dikeluarkan dalam versi terbaru:  
Perengsa

### 12 Maklumat ekologi

- **Ketoksikan**
- **Ketoksikan akuatik:** Tiada maklumat lanjut yang diperoleh.
- **Keterusan dan keterdegradasikan** Tiada maklumat lanjut yang diperoleh.
- **Kelakuan dalam sistem alam sekitar:**
- **Potensi bioakumulatif** Tiada maklumat lanjut yang diperoleh.
- **Mobiliti di dalam tanah** Tiada maklumat lanjut yang diperoleh.
- **Maklumat tambahan ekologi:**
- **Nota am:**  
Bahaya air kelas 1 (Peraturan Jerman) (Penilaian sendiri): sedikit berbahaya kepada air  
Jangan biarkan produk yang tidak dicairkan atau dalam kuantiti yang banyak memasuki air tanah, saluran air atau sistem pembetungan.
- **Keputusan penilaian PBT dan vPvB**
- **PBT:** Tidak berkenaan
- **vPvB:** Tidak berkenaan
- **Kesan buruk yang lain** Tiada maklumat lanjut yang diperoleh.

### 13 Maklumat pelupusan

- **Kaedah rawatan sisa**
- **Syor:**  
Tidak boleh dilupuskan bersama dengan sampah isi rumah. Jangan biarkan produk memasuki sistem pembetungan.

(Bersambung ke halaman 6)

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

Tarikh cetak 02.09.2022

Disemak semula pada 02.09.2022

Nama dagang: *Lead Citrate Ready to use*

(Sambungan halaman 5)

- **Pembungkusan yang tidak bersih:**
- **Syor:** *Pelupusan mestilah dijalankan menurut peraturan rasmi*
- **Agan pencuci yang disyorkan:** *Air, jika perlu, digunakan bersama dengan agan pencuci.*

### 14 Maklumat pengangkutan

· <b>Hazard persekitaran:</b>	Tidak berkenaan
· <b>Langkah perlindungan khas untuk pengguna</b> · <b>Segregation groups</b>	Tidak berkenaan (SGG7) <i>Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds</i>
· <b>Stowage Category</b>	A
· <b>Pengangkutan dalam pukal menurut Lampiran II MARPOL73/78 dan Kod IBC</b>	Tidak berkenaan
· <b>Pengangkutan/Maklumat Tambahan:</b>	
· <b>ADR</b> · <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>IMDG</b> · <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>"Peraturan Model" UN:</b>	Tidak sah

### 15 Maklumat pengawalseliaan

- **Peraturan/undang-undang keselamatan, kesihatan dan persekitaran khusus untuk bahan atau campuran tersebut**  
*Tiada maklumat lanjut yang diperolehi.*

- **Senarai Rujukan Bahan Berbahaya Alam Sekitar**

*Tiada ramuan yang disenaraikan.*

- **Unsur label GHS** *Produk ini dikelaskan dan dilabelkan menurut Sistem Terharmonisasi Global (GHS).*
- **Piktogram hazard**



GHS07

- **Perkataan isyarat Amaran**
- **Pernyataan hazard**  
*Menyebabkan kerengsaan kulit.  
Menyebabkan kerengsaan mata yang serius.  
Boleh menyebabkan kerengsaan pernafasan.*
- **Pernyataan langkah perlindungan**  
*Elakkan daripada tersedut habuk/wasap/gas/kabus/wap/semburan.*

(Bersambung ke halaman 7)

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

Tarikh cetak 02.09.2022

Disemak semula pada 02.09.2022

**Nama dagang: Lead Citrate Ready to use**

(Sambungan halaman 6)

*Pakai sarung tangan pelindung / perlindungan mata / perlindungan muka.*

*JIKA TERKENA MATA: Bilas berhati-hati dengan air selama beberapa minit. Tanggalkan kanta lekap, jika ada dan dapat dilakukan dengan mudah. Teruskan membilas.*

*Tanggalkan pakaian tercemar dan basuh sebelum menggunakannya semula.*

*Simpan di tempat berkunci.*

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

· **Penilaian keselamatan bahan kimia:** Penilaian Keselamatan Bahan Kimia belum dilakukan.

### **16 Maklumat lain**

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

· **Hubungi:**

· **Singkatan dan akronim:**

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

*IMDG: International Maritime Code for Dangerous Goods*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

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

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*Kreng. Kulit 2: Kakisan atau kerengsaan kulit – Kategori 2*

*Kreng. Mata 2: Kerosakan mata atau kerengsaan mata yang serius – Kategori 2*

*STOT SE 3: Ketoksikan organ sasaran khusus (pededahan tunggal) – Kategori 3*

MY

# 安全資料表

## 據根根據據性化學品標示及通識規則

打印日期 2022.09.02

在 2022.09.02 審核

### 1 化學品與廠商資料

- 產品識別者
- 化學品中文名稱/名稱/化學品俗名或商品名: Lead Citrate Ready to use
- 商品編號: 22410, 22410-01
- 相應純物質或者混合物的相關下位用途及禁止用途 無相關詳細資料。
- 物質或混合物的用途 實驗室化學物
- 安全技術說明書內供應商詳細信息
- 企業名稱:  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- 可獲取更多資料的部門: Product safety department
- 緊急聯繫電話號碼:  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 危害辨識資料

- 緊急情況概述:  
透明的，液體，造成皮膚刺激。造成嚴重眼睛刺激。可能造成呼吸道刺激。

- GHS危險性類別



腐蝕/刺激皮膚物質 第2級	H315 造成皮膚刺激
嚴重損傷/刺激眼睛物質 第2A級	H319 造成嚴重眼睛刺激
特定標的器官系統毒性物質(單一暴露) 第3級	H335 可能造成呼吸道刺激

- 標籤要素

- GHS標籤要素 本產品根據化學物質分類及標記全球協調制度(GHS)進行了分類及標記。

- 象形圖



GHS07

- 警示詞 警告

- 危險性說明

造成皮膚刺激  
造成嚴重眼睛刺激  
可能造成呼吸道刺激

- 防範說明

- 預防措施

避免吸入粉塵/煙/氣體/煙霧/蒸氣/噴霧。  
戴防護手套/防護眼罩/防護面具。

- 事故響應

若不慎吸入：將患者移到空氣新鮮處，保持呼吸舒適的體位休息。  
如進入眼睛：用水小心清洗數分鐘。如帶隱形眼鏡且可方便地取出，取出隱形眼鏡。繼續清洗。

(在 2 頁繼續)

# 安全資料表

## 據根據據據性化學品標示及通識規則

打印日期 2022.09.02

在 2022.09.02 審核

化學品中文名稱名稱名稱化學品俗名或商品名：Lead Citrate Ready to use

(在 1 頁繼續)

- **安全貯存**  
加鎖存放。
- **廢棄處置**  
按照地方/區域/國家/國際法規處理內容物之廢棄/容器。
- **其他有害性**
- **PBT(殘留性、生物濃縮性、毒性物質) 及 vPvB(高殘留性、高生物濃縮性物質)評價結果**
- **PBT(殘留性、生物濃縮性、毒性物質)** 不適用的
- **vPvB(高殘留性、高生物濃縮性物質)**: 不適用的

### 3 成分辨識資料

- **混合物**  
描述描述描述以下含有無害添加劑的成分組成的混合物
- **危險的成分**: 無效

### 4 急救措施

- **應急措施要領**
- 吸入吸入吸入一病人不清醒時,請讓病人側躺以便移動。
- **皮膚接觸**: 馬上用水和肥皂進行徹底的沖洗。
- **眼睛接觸**: 張開眼睛在流水下沖洗數分鐘. 如果症狀仍然持續,請諮詢醫生。
- 食入食入食入如果症狀仍然持續,請諮詢醫生。
- **給醫生的資料**:  
· **最重要的急慢性症狀及其影響** 無相關詳細資料。  
· **需要及時的醫療處理及特別處理的症狀** 無相關詳細資料。

### 5 滅火措施

- **滅火方法**
- **滅火的方法和滅火劑**: 使用適合四周環境的滅火措施。
- **特別危險性** 無相關詳細資料。
- **特殊滅火方法**
- **消防人員特殊的防護裝備**: 沒有要求特別的措施。

### 6 洩漏處理方法

- **保護措施** 沒有要求。
- **環境保護措施**:  
用大量的水進行稀釋。  
切勿讓其進入下水道/水面或地下水。
- **密封及淨化方法和材料**:  
吸收液體粘合原料 (沙粒、矽藻土、酸性粘合劑、通用粘合劑、鋸屑)。  
確保有足夠的通風裝置。
- **參照其他部分**  
有關安全處理的資料請參閱第 7 節。  
有關個人保護裝備的資料請參閱第 8 節。  
有關棄置的資料請參閱第 13 節。

TW

(在 3 頁繼續)



# 安全資料表

## 據根據危險性化學品標示及通識規則

打印日期 2022.09.02

在 2022.09.02 審核

化學品中文名稱名稱: 化學品俗名或商品名: Lead Citrate Ready to use

(在 2 頁繼續)

### 7 安全處置與儲存方法

- **操作處置**
- 儲存 儲存 儲存
  - 確保工作間有良好的通風/排氣裝置.
  - 防止氣溶膠的形成.
- **有關火災及防止爆炸的資料:** 不需特別的措施.
- **混合危險性等安全儲存條件**
- 儲存 儲存 儲存
  - **儲存庫和容器須要達到的要求:** 沒有特別的要求.
  - **有關使用一個普通的儲存設施來儲存的資料:** 不需要.
  - **有關儲存條件的更多資料:** 將容器密封.
  - **具體的最終用戶** 無相關詳細資料.

### 8 暴露預防措施

- **工程控制方法:** 沒有進一步數據,見第 7 項.
- **控制變數**
- **在工作場需要監控的限值成分** 該產品不含任何必須在工作間受到監視的重要價值的材料.
- **額外的資料:** 制作期間有效的清單將作為基礎來使用.
- **遺漏控制**
- **個人防護設備:**
- **一般保護和衛生措施:**
  - 遠離食品、飲料和飼料.
  - 立即除去所有的不潔的和被汙染的衣服.
  - 在休息之前和工作完畢後請清洗雙手.
  - 避免和眼睛及皮膚接觸.
- **呼吸系統防護:**
  - 如果會短暫接觸或在低汙染的情況下,請使用呼吸過濾裝置. 如果會深入或較長時間接觸,請使用獨立的呼吸保護裝置.
- **手防護:**



保護手套

手套的物料必須是不滲透性的,且能抵抗該產品/物質/添加劑.  
基於缺乏測試,對於產品/制劑/化學混合物,並不會提供手套材料的建議  
選擇手套材料時,請注意材料的滲透時間,滲濾率和降解參數

- **手套材料**
  - 選擇合適的手套不單取決於材料,亦取決於質量特征,以及來自哪一間生產廠家,因為該產品是由很多材料配制而成,手套材料的抵抗力並不可預計,所以,必須在使用之前進行檢查
- **滲入手套材料的時間** 請向勞保手套生產廠家獲取準確的破裂時間並觀察實際的破裂時間
- **眼睛防護:**



密封的護目鏡

TW

(在 4 頁繼續)

# 安全資料表

## 據根據據據性化學品標示及通識規則

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(在 3 頁繼續)

### 9 物理及化學性質

· 有關基本物理及化學特性的資訊	
· 一般說明	
外觀外觀外觀	
形狀形狀形狀	液體
顏色顏色顏色	透明的
氣味氣味氣味	無特性的
· 嗅覺閾限	未決定.
· pH值 在 20 °C:	7
· 條件的更改	
熔點熔點熔點	0 °C
沸點沸點沸點和沸程:	100 °C
閃點閃點閃點	不適用的
· 可燃性 (固體、氣體): 不適用的	
· 分解溫度:	未決定.
· 自燃溫度:	該產品是不自燃的
· 爆炸的危險性:	該產品並沒有爆炸的危險
· 爆炸極限:	
較低較低較低	未決定.
較高較高較高	未決定.
· 蒸氣壓 在 20 °C:	23 hPa
密度密度密度0 °C:	1 g/cm <sup>3</sup>
· 相對密度	未決定.
· 蒸氣密度	未決定.
· 蒸發速率	未決定.
· 溶解性	
水:	完全可拌和的
辛醇辛醇辛醇分配係數:	未決定.
黏性黏性黏性	
動態:	未決定.
運動學的:	未決定.
· 溶劑成份:	
水:	97.0 %
固體成份:	0.0 %
· 其他資訊	
無相關詳細資料。	

### 10 安定性及反應性

- 反應性應相關詳細資料。
- 穩定穩定穩定
- 分解分解分解免燃情況: 如果遵照規格使用則不會分解。
- 有害有害有害可能性 未有已知的危險反應。
- 避免避免避免條件 無相關詳細資料。
- 不相容的物質: 無相關詳細資料。

(在 5 頁繼續)

# 安全資料表

## 據根據據據性化學品標示及通識規則

打印日期 2022.09.02

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化學品中文名稱名稱名稱化學品俗名或商品名：Lead Citrate Ready to use

(在 4 頁繼續)

· 危險的分解產物: 未知有危險的分解產品。

### 11 毒性資料

· 對毒性學影響的資訊

· 急性毒性:

· 重要的刺激影響:

皮膚皮膚刺激皮膚和粘膜。

· 在眼睛上面: 刺激。

致敏致敏致敏作用有已知的敏化影響。

· 更多毒物的資料:

根據有關配製的一般歐盟分類指南的計算方法 (刊印在最新版本), 該產品顯示以下的危險:

刺激性的

### 12 生態資料

· 毒態毒性毒性

· 水生毒性: 無相關詳細資料。

持久持久持久持久相關詳細資料。

· 環境系統習性:

· 潛在的累積累積相關詳細資料。

土壤土壤動性動性相關詳細資料。

· 額外的生態學資料:

· 總括注解:

水危害級別 1 (德國規例) (通過名單進行自我評估): 對水是稍微危害的

不要讓未稀釋或大量的產品接觸地下水、水道或者污水系統。

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

· PBT(殘留性、生物濃縮性、毒性物質) 不適用

· vPvB(高殘留性、高生物濃縮性物質): 不適用

其他其他其他其他相關詳細資料。

### 13 廢棄處置方法

· 廢棄處置方法

建議建議建議將該產品和家居垃圾一起丟棄。不要讓該產品接觸污水系統。

· 受污染的容器和包裝:

建議建議建議根據官方的規章來丟棄。

建議建議建議洗滌如有必要請使用水及清潔劑進行清潔。

### 14 運送資料

· 環境危害

不適用

· 用戶特別預防措施

不適用

· Segregation groups

(SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds

(在 6 頁繼續)

# 安全資料表

## 據根據據據性化學品標示及通識規則

打印日期 2022.09.02

在 2022.09.02 審核

化學品中文名稱名稱名稱化學品俗名或商品名：Lead Citrate Ready to use

(在 5 頁繼續)

· Stowage Category	A
· MARPOL73/78(針對船舶引起的海洋污染預防協約 附件書根據根據國際國際貨物編碼)值大量大量 運送運送運送	不適用
運輸運輸運輸的資料:	
· ADR	
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· IMDG	
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "標準規定":	無效

### 15 法規資料

- 對相應純物質或者混合物的安全、保健及環境法規/法律 無相關詳細資料。
- 優先管理化學品之指定及運作管理辦法

附表附表對於未滿十八歲羈戒羈戒後未滿女年女性變工具危害性之化學品

沒有列出成份

· 附件 1: 2 條第 2 款指定之化學品

沒有列出成份

· 附件 2: 2 條第 3 款指定之化學品

沒有列出成份

· 新化學物質及既有化學物質資料登錄辦法 英

沒有列出成份

國現國現化學物質名錄

7732-18-5 水

7429-91-6 鎊

· TCSCA

列管編號編號

沒有列出成份

· 毒性分類

沒有列出成份

· 管制濃度 ( w/w% )

沒有列出成份

· 大量運作基準(公斤)

沒有列出成份

· 新化學物質及既有化學物質資料登錄辦法, 附表六

沒有列出成份

· TCSI - Taiwan Chemical Substance Inventory

列出所有成分

(在 7 頁繼續)

# 安全資料表

## 據根據危險性化學品標示及通識規則

打印日期 2022.09.02

在 2022.09.02 審核

化學品中文名稱名稱：化學品俗名或商品名： Lead Citrate Ready to use

(在 6 頁繼續)

· **GHS標籤元素** 本產品根據化學物質分類及標記全球協調制度(GHS)進行了分類及標記。

· **象形圖**



GHS07

**警示** 警示 警告

· **危險性說明**

造成皮膚刺激  
造成嚴重眼睛刺激  
可能造成呼吸道刺激

· **防範說明**

· **預防措施**

避免吸入粉塵/煙/氣體/煙霧/蒸氣/噴霧。  
戴防護手套/防護眼罩/防護面具。

· **事故響應**

若不慎吸入：將患者移到空氣新鮮處，保持呼吸舒適的體位休息。  
如進入眼睛：用水小心清洗數分鐘。如帶隱形眼鏡且可方便地取出，取出隱形眼鏡。繼續清洗。

· **安全貯存**

加鎖存放。

· **廢棄處置**

按照地方/區域/國家/國際法規處理內容物之廢棄/容器。

· **化學物質安全性評價**：尚未進行化學物質安全性評價

## 16 其他資料

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

· **聯絡:**

· **縮寫:**

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

IMDG: International Maritime Code for Dangerous Goods

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

PBT: 持久性生物累積性有毒物質

vPvB: very Persistent and very Bioaccumulative

腐蝕/刺激皮膚物質 第2級: Skin corrosion/irritation – Category 2

嚴重損傷/刺激眼睛物質 第2A級: Serious eye damage/eye irritation – Category 2A

特定標的器官系統毒性物質(單一暴露) 第3級: Specific target organ toxicity (single exposure) – Category 3

# Sikkerhetsdatablad

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

Trykkdato: 02.09.2022

revidert den: 02.09.2022

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

- **1.1 Produktidentifikator**
- **Handelsnavn:** Lead Citrate Ready to use
- **Artikkelnummer:** 22410, 22410-01
- **UFI:** SMX3-X0DX-E008-EHRH
- **1.2 Relevante identifiserte bruksområder for stoffet eller stoffblandingen og bruk som frarådes**  
Ikke noe mer relevant informasjon tilgjengelig.
- **Bruk av stoffet/ tilberedning** laboratoriekjemikalier
- **1.3 Opplysninger om leverandøren av sikkerhetsdatabladet**
- **Produsent/leverandør:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- **Avdeling for nærmere informasjon:** Product safety department
- **1.4 Nødtelefonnummer**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## Avsnitt 2: Fareidentifikasjon

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



GHS07

- Skin Irrit. 2 H315 Irriterer huden.
- Eye Irrit. 2 H319 Gir alvorlig øyeirritasjon.
- STOT SE 3 H335 Kan forårsake irritasjon av luftveiene.

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



GHS07

- **Varselord** Advarsel
- **Faresetninger**  
H315 Irriterer huden.  
H319 Gir alvorlig øyeirritasjon.  
H335 Kan forårsake irritasjon av luftveiene.
- **Sikkerhetssetninger**  
P261 Unngå innånding av støv/røyk/gass/tåke/damp/aerosoler.  
P280 Benytt vernehansker/øyevern/ansiktsvern.  
P304+P340 VED INNÅNDING: Flytt personen til frisk luft og sørg for at vedkommende har en stilling som letter åndedrettet.

(fortsatt på side 2)

# Sikkerhetsdatablad

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

Trykkdato: 02.09.2022

revidert den: 02.09.2022

**Handelsnavn: Lead Citrate Ready to use**

(fortsatt fra side 1)

P305+P351+P338 **VED KONTAKT MED ØYNENE:** Skyll forsiktig med vann i flere minutter. Fjern eventuelle kontaktlinser dersom dette enkelt lar seg gjøre. Fortsett skyllingen.

P405 Oppbevares innelåst.

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

- **2.3 Andre farer**
- **Resultater av PBT- og vPvB-vurdering**
- **PBT:** Ikke brukbar.
- **vPvB:** Ikke brukbar.

### Avsnitt 3: Sammensetning/opplysninger om bestanddeler

- **3.2 Kjemisk karakterisering: Stoffblandinger**
- **Beskrivelse:** Blanding av nedenstående oppførte stoffer med ufarlige tilsetninger.
- **Farlige innholdsstoffer:** bortfaller
- **Ytterligere informasjon:** Teksten til de fareangivelsene som er inkludert her, kan konsulteres i kapittel 16.

### Avsnitt 4: Førstehjelpstiltak

- **4.1 Beskrivelse av førstehjelpstiltak**
- **Etter innånding:** Ved bevisstløshet lagring og transport i stabil sidestilling.
- **Etter hudkontakt:** Vask straks med vann og sepe og skyll godt etterpå.
- **Etter øyekontakt:**  
Skyll øynene med åpne øyenlokk i flere minutter under rennende vann. Ved fortsatt besvær tilkall lege.
- **Etter svelging:** Ved fortsatt besvær må lege konsulteres.
- **4.2 De viktigste symptomene og virkningene, både akutte og forsinkede**  
Ikke noe mer relevant informasjon tilgjengelig.
- **4.3 Angivelse av om umiddelbar legehjelp og spesialbehandling er nødvendig**  
Ikke noe mer relevant informasjon tilgjengelig.

### Avsnitt 5: Brannsløkkingstiltak

- **5.1 Sløkkingsmidler**
- **Egnede slukningsmidler:** Brannslukningstiltak tilpasses omgivelsene.
- **5.2 Særlige farer knyttet til stoffet eller stoffblandingen** Ikke noe mer relevant informasjon tilgjengelig.
- **5.3 Råd til brannmannskaper**
- **Spesielt verneutstyr:** Ingen spesielle tiltak nødvendig.

### Avsnitt 6: Tiltak ved utilsiktede utslipp

- **6.1 Personlige forsiktighetsregler, personlig verneutstyr og nødrutiner** Ikke nødvendig.
- **6.2 Forsiktighetsregler med hensyn til miljø**  
Fortynn med rikelig med vann.  
La ikke produktet komme ned i kloakk/overflatevann/grunnvann.
- **6.3 Metoder og materialer for oppsamling og rensing**  
Ta opp stoffet med væskebindende materiale (sand, kiselgur, syrebindemiddel, universalbindemiddel, sagflis).  
Sørg for tilstrekkelig ventilasjon.
- **6.4 Henvvisning til andre avsnitt**  
Informasjoner om sikker håndtering, se kapittel 7.  
Informasjoner om personlig beskyttelsesutstyr, se kapittel 8.

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# Sikkerhetsdatablad

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

Trykkdato: 02.09.2022

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**Handelsnavn: Lead Citrate Ready to use**

(fortsatt fra side 2)

Informasjoner om bortskaffelse/deponering, se kapittel 13.

## Avsnitt 7: Håndtering og lagring

- **7.1 Forsiktighetsregler for sikker håndtering**  
Sørg for god ventilasjon/avsugning på arbeidsplassen.  
Unngå aerosoldannelse.
- **Henvisninger om brann- og eksplosjonsvern:** Ingen særlige tiltak nødvendig.
- **7.2 Vilkår for sikker lagring, herunder eventuelle uforenligheter**
- **Lagring:**
- **Krav til lagerrom og beholdere:** Ingen spesielle krav.
- **Informasjoner om felles lagring:** Ikke nødvendig.
- **Ytterligere informasjoner om lagervilkårene:** Hold beholderne tett lukket.
- **7.3 Særlig(e) sluttanvendelse(r)** Ikke noe mer relevant informasjon tilgjengelig.

## Avsnitt 8: Eksponeringskontroll / personlig verneutstyr

- **8.1 Kontrollparametere**
- **Ytterligere informasjoner om utforming av tekniske anlegg:** Ingen ytterligere informasjoner, se punkt 7.
- **Komponenter med grenseverdier for arbeidsplass som må overholdes:**  
Produktet inneholder ingen relevante mengder av stoffer med arbeidsplassrelevante grenseverdier som må overvåkes.
- **Ytterligere informasjoner:** Basis: listene som var gyldige ved oppstillingen.
- **8.2 Eksponeringskontroll**
- **Personlig verneutstyr:**
- **Generelle verne- og hygienetiltak:**  
Holdes adskilt fra næringsmidler, drikkevarer og fôrstoffer.  
Fjern omgående forurensede, gjennomvåtede klær.  
Vask hendene før arbeidspauser og ved arbeidets slutt.  
Unngå berøring med øyne og hud.
- **Åndedrettsvern:**  
Ved korttidig eller liten belastning åndedrettsfilterapparat; ved intensiv eller lengre utsetting: bruk omluft-uavhengig åndedrettsbeskyttelsesapparat.
- **Håndvern:**



Beskyttelseshansker

- Hanskematerialet må være ugjennomtrengelig og bestandig overfor produktet /stoffet /blandingen.  
På grunn av manglende tester kan det ikke gis noen anbefaling om hanskemateriale for produktet / tilberedningsprosessen/kjemikalieblanding.
- Hanskematerialet velges under hensyntagen til holdbarhetstid, gjennomtrengelighet og degradering.
- **hanskemateriale**  
Valget av egnet hanske er ikke bare avhengig av materiale, men også av andre kvalitetskjennetegn og er forskjellig fra produsent til produsent. Da produktet representerer en sammensetning av flere stoffer, kan holdbarheten av hanskematerialet ikke forhåndsberegnes, og denne må testes før bruk.
  - **gjennomtrengingstid for hanskemateriale**  
Den nøyaktige holdbarhetstiden må bringes på det rene hos hanskeprodusenten og overholdes.

(fortsatt på side 4)



# Sikkerhetsdatablad

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

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Handelsnavn: Lead Citrate Ready to use

(fortsatt fra side 3)

· Øyevern:



Tettsittende vernebrille

## Avsnitt 9: Fysiske og kjemiske egenskaper

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

#### · alminnelige opplysninger

#### · Utseende:

Form:	Væske
Farge:	Gjennomsiktig
· Lukt:	Ikke karakteristisk.
· Luktterskel:	Ikke bestemt.

· pH-verdi ved 20 °C: 7

#### · Tilstandsendring

Smeltepunkt/frysepunkt:	0 °C
Startkokepunkt og kokeområde:	100 °C

· Flammepunkt: Ikke brukbar.

· Antennelighet (fast stoff, gass): Ikke brukbar.

· Nedbrytingstemperatur: Ikke bestemt.

· Selvantennelsestemperatur: Produktet er ikke selvantennelig.

· Eksplosive egenskaper: Produktet er ikke eksplosjonsfarlig.

#### · Eksplosjonsgrenser:

Nedre:	Ikke bestemt.
Øvre	Ikke bestemt.

· Damptrykk ved 20 °C: 23 hPa

· Tetthet ved 20 °C: 1 g/cm<sup>3</sup>

· Relativ tetthet: Ikke bestemt.

· Damptetthet: Ikke bestemt.

· Fordampingshastighet: Ikke bestemt.

· Løslighet i / blandbarhet med vann:

Fullstendig blandbar.

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

#### · Viskositet:

Dynamisk:	Ikke bestemt.
Kinematisk:	Ikke bestemt.

#### · Løsningsmiddelandel:

Vann:	97,0 %
VOC (EF)	0,00 %

Andel faste stoffer: 0,0 %

(fortsatt på side 5)

NO

# Sikkerhetsdatablad

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

Trykkdato: 02.09.2022

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Handelsnavn: *Lead Citrate Ready to use*

(fortsatt fra side 4)

- **9.2 Andre opplysninger** Ikke noe mer relevant informasjon tilgjengelig.

### Avsnitt 10: Stabilitet og reaktivitet

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

### Avsnitt 11: Toksikologiske opplysninger

- **11.1 Opplysninger om toksikologiske virkninger**
- **Akutt giftighet** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Primær irritasjonsvirkning:**
- **Hudetsing/hudirritasjon**  
Irriterer huden.
- **Alvorlig øyeskade/øyeirritasjon**  
Gir alvorlig øyeirritasjon.
- **Sensibilisering ved innånding eller hudkontakt** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Informasjon om følgende grupper med potensielle virkninger:**
- **CMR-virkninger (kreftfremkallende virkninger, arvestoffskadelige og reproduksjonsskadelige virkninger)**
- **Arvestoffskadelig virkning på kjønnseller** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Kreftfremkallende egenskap** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Reproduksjonstoksisitet** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **STOT – enkelteksponering**  
Kan forårsake irritasjon av luftveiene.
- **STOT – gjentatt eksponering** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Aspirasjonsfare** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.

### Avsnitt 12: Økologiske opplysninger

- **12.1 Giftighet**
- **Akvatisk toksisitet:** Ikke noe mer relevant informasjon tilgjengelig.
- **12.2 Persistens og nedbrytbarhet** Ikke noe mer relevant informasjon tilgjengelig.
- **12.3 Bioakkumuleringsevne** Ikke noe mer relevant informasjon tilgjengelig.
- **12.4 Mobilitet i jord** Ikke noe mer relevant informasjon tilgjengelig.
- **Ytterligere økologiske opplysninger:**
- **Generelle opplysninger:**  
Vannfareklasse 1 (D) (Selvklassifisering): lett farlig for vann  
Ikke la stoffet komme ufortynnet ned i grunnvannet, i vassdrag eller i kloakker.
- **12.5 Resultater av PBT- og vPvB-vurdering**
- **PBT:** Ikke brukbar.
- **vPvB:** Ikke brukbar.
- **12.6 Andre skadevirkninger** Ikke noe mer relevant informasjon tilgjengelig.

NO

(fortsatt på side 6)

# Sikkerhetsdatablad

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

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### Avsnitt 13: Sluttbehandling

- **13.1 Avfallsbehandlingsmetoder**
- **Anbefaling:** Må ikke bortskaffes sammen med husholdningsavfall. Må ikke komme ned i kloakk.
- **Ikke rengjort emballasje:**
- **Anbefaling:** Deponering i henhold til myndighetenes forskrifter.
- **Anbefalt rengjøringsmiddel:** Vann, eventuelt med tilsetning av rengjøringsmidler.

### Avsnitt 14: Transportopplysninger

- |  |  |
|--|--|
| · <b>14.5 Miljøfarer</b>   | Ikke brukbar.  |
| · <b>14.6 Særlige forsiktighetsregler ved bruk</b>                                       | Ikke brukbar.  |
| · <b>Segregation groups</b>  | (SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds    |
| · <b>Stowage Category</b>  | A  |
| · <b>14.7 Bulktransport i henhold til vedlegg II til MARPOL 73/78 og IBC-regelverket</b> | Ikke brukbar.  |
| · <b>Transport/ytterligere informasjon:</b>  |  |
| · <b>ADR</b>   |  |
| · <b>Unntatte mengder (EQ)</b>   | Kode: E1<br>Maksimal nettovekt per inneremballasje: 30 ml<br>Maksimal nettovekt per ytteremballasje: 1000 ml     |
| · <b>IMDG</b>  |  |
| · <b>Excepted quantities (EQ)</b>  | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>UN "Model Regulation":</b>  | bortfaller   |

### Avsnitt 15: Opplysninger om regelverk

- **15.1 Særlige bestemmelser / særskilt lovgivning om sikkerhet, helse og miljø for stoffet eller stoffblandingen**
- **Direktiv 2012/18/EU**
- **Spesifiserte farlige stoffer - VEDLEGG I** ingen av innholdsstoffene er listet opp
- **Forordning (EF) nr. 1907/2006 VEDLEGG XVII Begrensninger: 3**
- **Direktiv 2011/65/EF om begrensning av bruken av visse farlige stoffer i elektrisk og elektronisk utstyr - Vedlegg II**
- ingen av innholdsstoffene er listet opp
- **Forordning (EF) nr. 273/2004 om utgangsstoffer for narkotika**
- ingen av innholdsstoffene er listet opp
- **Forordning (EF) nr. 111/2005 om fastsettelse av regler for overvåking av handelen med utgangsstoffer for narkotika mel-lom Fellesskapet og tredjestater**
- ingen av innholdsstoffene er listet opp
- **15.2 Vurdering av kjemikaliesikkerhet** En kjemisk sikkerhetsvurdering er ikke utført.

NO

(fortsatt på side 7)

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

Trykkdato: 02.09.2022

revidert den: 02.09.2022

**Handelsnavn: Lead Citrate Ready to use**

(fortsatt fra side 6)

**Avsnitt 16: Andre opplysninger**

Opplysningene er basert på vårt kjennskap i dag. De utgjør dog ingen forsikring om produktens egenskaper og er ikke grunnlag for noe kontraktmessig rettsforhold.

**Forkortelser og akronymer:**

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

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Hudetsing/hudirritasjon – Kategori 2

Eye Irrit. 2: Alvorlig øyeskade/øyeirritasjon – Kategori 2

STOT SE 3: Giftvirkning på bestemte organer (enkelteksponering) – Kategori 3

NO

**Ficha de dados de segurança**  
em conformidade com 1907/2006/CE, Artigo 31°

data da impressão 02.09.2022

Revisão: 02.09.2022

### SECÇÃO 1: Identificação da substância/mistura e da sociedade/empresa

- **1.1 Identificador do produto**
- **Nome comercial:** Lead Citrate Ready to use
- **Código do produto:** 22410, 22410-01
- **UFI:** SMX3-X0DX-E008-EHRH
- **1.2 Utilizações identificadas relevantes da substância ou mistura e utilizações desaconselhadas**  
Não existe mais nenhuma informação relevante disponível.
- **Utilização da substância / da preparação** Químicos de laboratório
- **1.3 Identificação do fornecedor da ficha de dados de segurança**
- **Fabricante/fornecedor:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- **Entidade para obtenção de informações adicionais:** Product safety department
- **1.4 Número de telefone de emergência:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SECÇÃO 2: Identificação dos perigos

- **2.1 Classificação da substância ou mistura**
- **Classificação em conformidade com o Regulamento (CE) n.º 1272/2008**



GHS07

Skin Irrit. 2 H315 Provoca irritação cutânea.  
Eye Irrit. 2 H319 Provoca irritação ocular grave.  
STOT SE 3 H335 Pode provocar irritação das vias respiratórias.

- **2.2 Elementos do rótulo**
- **Rotulagem em conformidade com o Regulamento (CE) n.º 1272/2008**  
O produto classificou-se e está etiquetado em conformidade com o regulamento CLP.
- **Pictogramas de perigo**



GHS07

- **Palavra-sinal** Atenção
- **Advertências de perigo**  
H315 Provoca irritação cutânea.  
H319 Provoca irritação ocular grave.  
H335 Pode provocar irritação das vias respiratórias.
- **Recomendações de prudência**  
P261 Evitar respirar as poeiras/fumos/gases/névoas/vapores/aerossóis.  
P280 Usar luvas de proteção / proteção ocular / proteção facial.

( continuação na página 2 )

# Ficha de dados de segurança

## em conformidade com 1907/2006/CE, Artigo 31º

data da impressão 02.09.2022

Revisão: 02.09.2022

**Nome comercial:** *Lead Citrate Ready to use*

(continuação da página 1)

- P304+P340** *EM CASO DE INALAÇÃO:* retirar a pessoa para uma zona ao ar livre e mantê-la numa posição que não dificulte a respiração.
- P305+P351+P338** *SE ENTRAR EM CONTACTO COM OS OLHOS:* Enxaguar cuidadosamente com água durante vários minutos. Se usar lentes de contacto, retire-as, se tal lhe for possível. Continue a enxaguar.
- P405** *Armazenar em local fechado à chave.*
- P501** *Eliminar o conteúdo/recipiente de acordo com a legislação local/regional/nacional/internacional.*

- **2.3 Outros perigos**
- **Resultados da avaliação PBT e mPmB**
- **PBT:** Não aplicável.
- **mPmB:** Não aplicável.

### SECÇÃO 3: Composição/informação sobre os componentes

- **3.2 Caracterização química: Misturas**
- **Descrição:** Mistura das seguintes substâncias com aditivos não perigosos.
- **Substâncias perigosas:** não aplicável
- **Avisos adicionais:** O texto das indicações de perigo aqui incluído poderá ser consultado no capítulo 16.

### SECÇÃO 4: Medidas de primeiros socorros

- **4.1 Descrição das medidas de primeiros socorros**
- **Em caso de inalação:**  
*Se a vítima estiver inconsciente, posicioná-la e transportá-la com estabilidade, deitada lateralmente.*
- **Em caso de contacto com a pele:** Lavar imediatamente com água e sabão e enxaguar abundantemente.
- **Em caso de contacto com os olhos:**  
*Enxaguar os olhos durante alguns minutos sob água corrente, mantendo as pálpebras abertas. Em caso de persistência dos sintomas, consultar o médico.*
- **Em caso de ingestão:** *Se os sintomas persistirem, consultar o médico.*
- **4.2 Sintomas e efeitos mais importantes, tanto agudos como retardados**  
*Não existe mais nenhuma informação relevante disponível.*
- **4.3 Indicações sobre cuidados médicos urgentes e tratamentos especiais necessários**  
*Não existe mais nenhuma informação relevante disponível.*

### SECÇÃO 5: Medidas de combate a incêndios

- **5.1 Meios de extinção**
- **Meios adequados de extinção:** *Coordenar no local medidas para extinção do fogo.*
- **5.2 Perigos especiais decorrentes da substância ou mistura**  
*Não existe mais nenhuma informação relevante disponível.*
- **5.3 Recomendações para o pessoal de combate a incêndios**
- **Equipamento especial de protecção:** *Não são necessárias medidas especiais.*

### SECÇÃO 6: Medidas a tomar em caso de fugas accidentais

- **6.1 Precauções individuais, equipamento de protecção e procedimentos de emergência** *Não necessário.*
- **6.2 Precauções a nível ambiental:**  
*Diluir em bastante água.*  
*Evitar que penetre na canalização / águas superficiais / águas subterrâneas.*

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- **6.3 Métodos e materiais de confinamento e limpeza:**  
*Recolher com produtos que absorvam líquidos (areia, seixos, absorventes universais, serradura ).  
Assegurar uma ventilação adequada.*
- **6.4 Remissão para outras secções**  
*Para informações sobre uma manipulação segura, ver o capítulo 7.  
Para informações referentes ao equipamento de protecção individual, ver o capítulo 8.  
Para informações referentes à eliminação residual, ver o capítulo 13.*

### SECÇÃO 7: Manuseamento e armazenagem

- **7.1 Precauções para um manuseamento seguro**  
*Assegurar uma boa ventilação / exaustão no local de trabalho.  
Evitar a formação de aerossóis.*
- **Precauções para prevenir incêndios e explosões:** *Não são necessárias medidas especiais.*
- **7.2 Condições de armazenagem segura, incluindo eventuais incompatibilidades**
- **Armazenagem:**
- **Requisitos para espaços ou contentores para armazenagem:** *Sem requisitos especiais.*
- **Avisos para armazenagem conjunta:** *Não necessário.*
- **Outros avisos sobre as condições de armazenagem:** *Manter o recipiente hermeticamente fechado.*
- **7.3 Utilização(ões) final(is) específica(s)** *Não existe mais nenhuma informação relevante disponível.*

### SECÇÃO 8: Controlo da exposição/Protecção individual

- **8.1 Parâmetros de controlo**
- **Indicações adicionais para concepção de instalações técnicas:** *Não existem outras informações, ver ponto 7.*
- **Componentes cujo valor do limite de exposição no local de trabalho deve ser monitorizado:**  
*O produto não contém quantidades relevantes de substâncias cujo valor limite relacionado no local de trabalho tenha que ser monitorizado.*
- **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.  
Evitar o contacto com os olhos e com a pele.*
- **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:**



Luvas de protecção

*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. O facto de o produto ser composto por uma variedade de materiais leva a que não seja possível prever a duração dos mesmos e, conseqüentemente, das luvas, sendo assim*

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necessário proceder a uma verificação antes da sua utilização.

- **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:**



Óculos de protecção totalmente fechados

### SECÇÃO 9: Propriedades físico-químicas

#### · 9.1 Informações sobre propriedades físicas e químicas de base

##### · Informações gerais

##### · Aspeto:

**Forma:** Líquido

**Cor:** Transparente

· **Odor:** Não característico.

· **Limiar olfativo:** Não determinado.

· **valor pH em 20 °C:** 7

##### · Mudança do estado:

**Ponto de fusão/ponto de congelação:** 0 °C

**Ponto de ebulição inicial e intervalo de ebulição:** 100 °C

· **Ponto de inflamação:** Não aplicável.

· **Inflamabilidade (sólido, gás):** Não aplicável.

· **Temperatura de decomposição:** Não determinado.

· **Temperatura de autoignição:** O produto não é auto-inflamável.

· **Propriedades explosivas:** O produto não corre o risco de explosão.

##### · Limites de explosão:

**Inferior:** Não determinado.

**Superior:** Não determinado.

· **Pressão de vapor em 20 °C:** 23 hPa

· **Densidade em 20 °C:** 1 g/cm<sup>3</sup>

· **Densidade relativa** Não determinado.

· **Densidade de vapor** Não determinado.

· **Taxa de evaporação:** Não determinado.

##### · Solubilidade em / miscibilidade com água:

Completamente misturável.

· **Coefficiente de partição: n-octanol/água** Não determinado.

##### · Viscosidade:

**Dinâmico:** Não determinado.

**Cinemático:** Não determinado.

##### · Percentagem de solvente:

**Água:** 97,0 %

**VOC (UE)** 0,00 %

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<b>Percentagem de substâncias sólidas:</b>	0,0 %
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<b>· 9.2 Outras informações</b>	Não existe mais nenhuma informação relevante disponível.
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### SECÇÃO 10: Estabilidade e reactividade

- **10.1 Reactividade** Não existe mais nenhuma informação relevante disponível.
- **10.2 Estabilidade química**
- **Decomposição térmica / condições a evitar:** Não existe decomposição se usado de acordo com as especificações.
- **10.3 Possibilidade de reações perigosas** Não se conhecem 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** Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Efeito de irritabilidade primário:**
- **Corrosão/irritação cutânea**  
Provoca irritação cutânea.
- **Lesões oculares graves/irritação ocular**  
Provoca irritação ocular grave.
- **Sensibilização respiratória ou cutânea**  
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Avisos adicionais de toxicologia:**
- **Efeitos CMR (carcinogenicidade, mutagenicidade e efeitos tóxicos na reprodução)**
- **Mutagenicidade em células germinativas**  
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Carcinogenicidade** Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Toxicidade reprodutiva** Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Toxicidade para órgãos-alvo específicos (STOT) - exposição única**  
Pode provocar irritação das vias respiratórias.
- **Toxicidade para órgãos-alvo específicos (STOT) - exposição repetida**  
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Perigo de aspiração** Com base nos dados disponíveis, os critérios de classificação não são preenchidos.

### SECÇÃO 12: Informação ecológica

- **12.1 Toxicidade**
- **Toxicidade aquática:** Não existe mais nenhuma informação relevante disponível.
- **12.2 Persistência e degradabilidade** Não existe mais nenhuma informação relevante disponível.
- **12.3 Potencial de bioacumulação** Não existe mais nenhuma informação relevante disponível.
- **12.4 Mobilidade no solo** Não existe mais nenhuma informação relevante disponível.
- **Outras indicações ecológicas:**
- **Indicações gerais:**  
Classe de perigo para a água 1 (D) (auto-classificação): pouco perigoso para a água  
Não deixar chegar substâncias concentradas, ou seja quantidades grandes, às águas subterrâneas, aos cursos de água ou à canalização.

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- **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.
- **Meio de limpeza recomendado:** Água, eventualmente com adição de produtos de limpeza

### SECÇÃO 14: Informações relativas ao transporte

- |   |  |
|---|--|
| · <b>14.5 Perigos para o ambiente:</b>  | Não aplicável.   |
| · <b>14.6 Precauções especiais para o utilizador</b>  | Não aplicável.   |
| · <b>Segregation groups</b>   | (SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds                      |
| · <b>Stowage Category</b>   | A  |
| · <b>14.7 Transporte a granel em conformidade com o anexo II da Convenção MARPOL e o Código IBC</b> | Não aplicável.   |
| · <b>Transporte/outras informações:</b>   |  |
| · <b>ADR</b>  |  |
| · <b>Quantidades exceptuadas (EQ)</b>   | Código: E1<br>Quantidade líquida máxima por embalagem interior: 30 ml<br>Quantidade líquida máxima por embalagem exterior: 1000 ml |
| · <b>IMDG</b>   |  |
| · <b>Excepted quantities (EQ)</b>   | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml                   |
| · <b>UN "Model Regulation":</b>   | não aplicável  |

### SECÇÃO 15: Informação sobre regulamentação

- **15.1 Regulamentação/legislação específica para a substância ou mistura em matéria de saúde, segurança e ambiente**
- **Diretiva 2012/18/UE**
- **Substâncias perigosas designadas - ANEXO I** Nenhum dos componentes se encontra listado.
- **Regulamento (CE) n.º 1907/2006 ANEXO XVII** Condições de limitação: 3
- **Directiva 2011/65/UE relativa à restrição do uso de determinadas substâncias perigosas em equipamentos eléctricos e electrónicos - Anexo II**
- Nenhum dos componentes se encontra listado.

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· **REGULAMENTO (UE) 2019/1148**· **Anexo I - PRECURSORES DE EXPLOSIVOS OBJETO DE RESTRIÇÕES (Valor-limite máximo para efeitos de licenciamento nos termos do artigo 5.o, n.o 3)**

Nenhum dos componentes se encontra listado.

· **Anexo II - PRECURSORES DE EXPLOSIVOS PASSÍVEIS DE PARTICIPAÇÃO**

Nenhum dos componentes se encontra listado.

· **Regulamento (CE) n.º 273/2004 relativo aos precursores de drogas**

Nenhum dos componentes se encontra listado.

· **Regulamento (CE) n.º 111/2005 que estabelece regras de controlo do comércio de precursores de drogas entre a Comunidade e países terceiros**

Nenhum dos componentes se encontra listado.

· **15.2 Avaliação da segurança química:** Não foi realizada nenhuma Avaliação de Segurança Química.**SECÇÃO 16: Outras informações**

As informações fornecidas baseiam-se no estado actual dos nossos conhecimentos, embora não representem uma garantia das propriedades do produto e não fundamentam uma relação contratual.

· **Abreviaturas e acrónimos:**

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

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Corrosão/irritação cutânea – Categoria 2

Eye Irrit. 2: Lesões oculares graves/irritação ocular – Categoria 2

STOT SE 3: Toxicidade para órgãos-alvo específicos (exposição única) – Categoria 3

# Паспорт безопасности в соответствии с ГОСТ 30333-2007

Дата печати: 02.09.2022

Дата редактирования: 02.09.2022

## 1 Идентификация химической продукции и сведения о производителе или поставщике

- Идентификатор продукта
- Торговое наименование: Lead Citrate Ready to use
- Артикульный номер: 22410, 22410-01
- Соответствующие установленные применения вещества или смеси и не рекомендуемые области использования  
Отсутствует какая-либо соответствующая информация.
- Применение вещества / препарата Лабораторные химикаты
- Подробная информация поставщика паспорта безопасности
- Производитель / Поставщик:  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- Отдел, предоставляющий информацию: Product safety department
- Номер телефона экстренной связи:  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Идентификация опасности (опасностей)

- Классификация вещества или смеси



Раздражение кожи 2 H315 Вызывает раздражение кожи.

Eye Irritation 2A H319 Вызывает серьезное раздражение глаз.

СТОМ - однократно 3 H335 Может вызывать раздражение дыхательных путей.

- Элементы маркировки
- Элементы маркировки в соответствии с СГС  
Данный продукт классифицируется и маркируется в соответствии с Согласованной на глобальном уровне системой классификации и маркировки химических веществ (GHS).
- Пиктограммы, обозначающие опасности



GHS07

- Сигнальное слово *Осторожно*
- Предупреждения об опасности  
Вызывает раздражение кожи.  
Вызывает серьезное раздражение глаз.  
Может вызывать раздражение дыхательных путей.
- Меры предосторожности  
Избегать вдыхания пыли/дыма/газа/тумана/паров/распылителей жидкости.  
Пользоваться защитными перчатками и средствами защиты глаз/лица.

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# Паспорт безопасности

## в соответствии с ГОСТ 30333-2007

Дата печати: 02.09.2022

Дата редактирования: 02.09.2022

**Торговое наименование:** *Lead Citrate Ready to use*

(Продолжение страницы 1)

**ПРИ ВДЫХАНИИ:** Вынести пострадавшего на свежий воздух и обеспечить ему полный покой в удобном для дыхания положении.

**ПРИ ПОПАДАНИИ В ГЛАЗА:** Осторожно промыть глаза водой в течение нескольких минут. Снять контактные линзы, если вы пользуетесь ими и если это легко сделать. Продолжить промывание глаз.

Хранить под замком.

Утилизировать содержимое / тару в соответствии с местными / региональными / национальными / международными предписаниями.

- **Другие опасные факторы**
- **Результаты оценки PBT (устойчивое биоаккумулятивное токсическое вещество) и vPvB (очень устойчивое биоаккумулятивное вещество)**
- **PBT:** Неприменимо.
- **vPvB:** Неприменимо.

### 3 Состав (информация о компонентах)

- **Химическая характеристика:** Смеси
- **Описание:** Смесь из веществ, перечисленных ниже, с неопасными добавками.
- **Содержащиеся опасные вещества:** отпадает
- **Дополнительные указания:** Текст приведённых указаний на факторы риска см. в Главе 16.

### 4 Меры первой помощи

- **Описание мер первой медицинской помощи**
- **После вдыхания:**  
При потере сознания (обморочном состоянии) положить пациента на бок в стабильном положении для транспортировки.
- **После контакта с кожей:** Немедленно промыть с помощью воды и мыла, хорошо сполоснуть.
- **После контакта с глазами:**  
Промойте открытый глаз под проточной водой в течение нескольких минут. При сохранении симптомов обратитесь к врачу.
- **После проглатывания:** При сохранении симптомов обратиться к врачу за консультацией.
- **Указания для врача:**
- **Наиболее важные симптомы и эффекты, как немедленные, так и проявляющиеся впоследствии**  
Отсутствует какая-либо соответствующая информация.
- **Указание на необходимость оперативной медицинской помощи и специального режима**  
Отсутствует какая-либо соответствующая информация.

### 5 Меры и средства обеспечения пожаровзрывобезопасности

- **Средства пожаротушения**
- **Надлежащие средства тушения:**  
Предпринять меры по тушению пожара, соответствующие окружающим условиям.
- **Особые опасности, создаваемые веществом или смесью**  
Отсутствует какая-либо соответствующая информация.
- **Рекомендации для пожарных**
- **Защитное оснащение:** Нет необходимости в каких-либо специальных мерах.

RU

(Продолжение на странице 3)

# Паспорт безопасности в соответствии с ГОСТ 30333-2007

Дата печати: 02.09.2022

Дата редактирования: 02.09.2022

**Торговое наименование: Lead Citrate Ready to use**

(Продолжение страницы 2)

## 6 Меры по предотвращению и ликвидации аварийных и чрезвычайных ситуаций и их последствий

- **Меры по обеспечению личной безопасности, защитное снаряжение и порядок действий в чрезвычайной ситуации**  
Не требуется.
- **Меры по защите окружающей среды:**  
Разбавить большим количеством воды.  
Не допускать попадания в канализационную систему / поверхностные или грунтовые воды.
- **Методы и материалы для локализации и очистки:**  
Собрать при помощи связывающего жидкость материала (песка, кизельгура, кислотнo-вяжущего средства, универсальных вяжущих средств, опилок).  
Обеспечить достаточную вентиляцию.
- **Ссылки на другие разделы**  
Информация по безопасному обращению - в Главе 7.  
Информация по индивидуальному защитному снаряжению - в Главе 8.  
Информация по утилизации - в Главе 13.

## 7 Правила хранения химической продукции и обращения с ней при погрузочно-разгрузочных работах

- **Обращение с веществом:**
- **Меры предосторожности по безопасному обращению**  
Обеспечить хорошую вентиляцию / вытяжку на рабочем месте.  
Не допускать образования аэрозолей.
- **Указания по защите от пожаров и взрывов:** Нет необходимости в каких-либо специальных мерах.
- **Условия безопасного хранения, включая несовместимости**
- **Хранение:**
- **Требования, предъявляемые к складским помещениям и таре:**  
Никаких особенных требований не предъявляется.
- **Указания по совместимости с другими веществами при хранении:** Не требуется.
- **Дальнейшие данные по условиям хранения:** Держать ёмкости плотно закрытыми.
- **Характерное конечное применение (или применения)**  
Отсутствует какая-либо соответствующая информация.

## 8 Средства контроля за опасным воздействием и средства индивидуальной защиты

- **Дополнительные указания по структуре технических устройств:**  
Никаких дополнительных данных; см. Пункт 7.
- **Параметры контроля**
- **Составляющие компоненты с предельными значениями, требующие мониторинга на рабочих местах:**  
Продукт не содержит никаких существенных объёмов веществ с предельными значениями, которые необходимо отслеживать на рабочих местах.
- **Дополнительные указания:**  
В качестве основы послужили списки, являвшиеся на момент составления актуальными.
- **Требования по охране труда и меры по обеспечению безопасности персонала**
- **Средства индивидуальной защиты:**
- **Общие меры по защите от воздействия и гигиене:**  
Держать подальше от продуктов питания, напитков и корма для животных.

(Продолжение на странице 4)

# Паспорт безопасности в соответствии с ГОСТ 30333-2007

Дата печати: 02.09.2022

Дата редактирования: 02.09.2022

**Торговое наименование: Lead Citrate Ready to use**

(Продолжение страницы 3)

Немедленно снять всю загрязнённую и пропитанную вредными веществами одежду.

Мыть руки перед перерывами и по окончании работы.

Избегать контакта с глазами и с кожей.

**· Защита органов дыхания:**

При кратковременном контакте с веществом или при воздействии вещества низкой концентрации пользоваться фильтрующим устройством для защиты органов дыхания. При интенсивном или более продолжительном контакте следует воспользоваться автономным устройством защиты органов дыхания.

**· Защита рук:**



Защитные перчатки (рукавицы).

Материал перчаток / рукавиц должен быть устойчивым к воздействию продукта / вещества / препарата и не пропускать их.

Никаких рекомендаций в отношении материала перчаток / рукавиц, пригодных для применения в ходе работы с продуктом / препаратом / смесью химикатов дать нельзя, так как никаких испытаний в этом отношении не проводилось.

Выбор материала перчаток / рукавиц производится с учётом времени прорыва, степени проницаемости и эрозии.

**· Материал перчаток / рукавиц**

Выбор подходящих перчаток / рукавиц определяется не только материалом, но также и другими качественными особенностями, причём между различными производителями существует большая разница. Так как продукт представляет собой смесь различных веществ, то не представляется никакой возможности для расчёта устойчивости материала, из которого изготовлены перчатки / рукавицы, что вызывает необходимость перепроверки на предмет пригодности перед использованием.

**· Период проницаемости материала перчаток / рукавиц.**

Необходимо осведомиться у производителя защитных перчаток / рукавиц о точном времени прорыва и придерживаться его.

**· Защита глаз:**



Плотно прилегающие защитные очки

## 9 Физико-химические свойства

**· Информация по основным физическим и химическим свойствам**

**· Общая информация**

**· Внешний вид:**

**Форма:**

Жидкость

**Цвет:**

Прозрачное

**· Запах:**

Не характерно

**· Порог запаха:**

Не определено.

**· Значение pH при 20 °C:**

7

**· Изменение состояния**

**Точка плавления / интервал температур**

**плавления:**

0 °C

**Точка кипения / интервал температур кипения:** 100 °C

(Продолжение на странице 5)

# Паспорт безопасности

## в соответствии с ГОСТ 30333-2007

Дата печати: 02.09.2022

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**Торговое наименование:** *Lead Citrate Ready to use*

(Продолжение страницы 4)

· Температурная точка вспышки:	Неприменимо.
· Воспламеняемость (твёрдое, газообразное вещество):	Неприменимо.
· Температура распада:	Не определено.
· Самовоспламеняемость:	Продукт не является самовоспламеняемым.
· Взрывоопасность:	Продукт не является взрывоопасным.
· Границы взрываемости: Нижняя:	Не определено.
Верхняя:	Не определено.
· Давление пара при 20 °С:	23 гПа
· Плотность при 20 °С:	1 г/см <sup>3</sup>
· Относительная плотность	Не определено.
· Плотность пара	Не определено.
· Скорость испарения	Не определено.
· Растворимость в / Смешиваемость с водой:	Полностью смешиваемо.
· Коэффициент распределения (n-октанол / вода):	Не определено.
· Вязкость: Динамическая:	Не определено.
Кинематическая:	Не определено.
· Содержание растворителя: Вода:	97,0 %
VOC (ЕС)	0,00 %
· Содержание твёрдых тел:	0,0 %
· Другая информация	Отсутствует какая-либо соответствующая информация.

### 10 Стабильность и реакционная способность

- **Реакционная способность** Отсутствует какая-либо соответствующая информация.
- **Химическая стабильность**
- **Термический распад / условия, которых следует избегать:**  
При использовании в соответствии с предписаниями не происходит никакого распада.
- **Возможность опасных реакций** Неизвестно ни о каких опасных реакциях.
- **Условия, вызывающие опасные изменения** Отсутствует какая-либо соответствующая информация.
- **Несовместимые материалы:** Отсутствует какая-либо соответствующая информация.
- **Опасные продукты распада:** Неизвестно ни о каких опасных продуктах распада.

### 11 Информация о токсичности

- **Информация по токсикологическому воздействию**
- **Острая токсичность:**
- **Первичное раздражающее воздействие:**
- **на кожу:** Раздражает кожу и слизистые оболочки.

(Продолжение на странице 6)



# Паспорт безопасности

## в соответствии с ГОСТ 30333-2007

Дата печати: 02.09.2022

Дата редактирования: 02.09.2022

**Торговое наименование:** *Lead Citrate Ready to use*

(Продолжение страницы 5)

- **на глаза:** Раздражающее воздействие.
- **Сенсибилизация:** Неизвестно о наличии сенсибилизирующего воздействия.
- **Дополнительные токсикологические указания:**  
На основании расчётного метода Всеобщей Классификационной Директивы ЕС для Препаратов в её последней (актуальной) редакции продукт представляет следующие виды опасности:  
Раздражающе

### 12 Информация о воздействии на окружающую среду

- **Токсичность**
- **Акватоксичность:** Отсутствует какая-либо соответствующая информация.
- **Стойкость и склонность к деградации** Отсутствует какая-либо соответствующая информация.
- **Поведение в экологических системах:**
- **Биоаккумулятивный потенциал** Отсутствует какая-либо соответствующая информация.
- **Подвижность в грунте** Отсутствует какая-либо соответствующая информация.
- **Дополнительные экологические указания:**
- **Общие указания:**  
Класс вредности для воды 1 (Само-классификация): немного вредно для воды  
Не допускать попадания продукта в грунтовые воды, водоёмы или в канализационную систему в неразбавленном виде или в больших количествах.
- **Результаты оценки РВТ (устойчивое биоаккумулятивное токсическое вещество) и vPvB (очень устойчивое биоаккумулятивное вещество)**
- **РВТ:** Неприменимо.
- **vPvB:** Неприменимо.
- **Другие вредные эффекты** Отсутствует какая-либо соответствующая информация.

### 13 Рекомендации по удалению отходов (остатков)

- **Методы обработки отходов**
- **Рекомендация:**  
Утилизация совместно с бытовыми отходами недопустима. Не допускать попадания в канализацию.
- **Неочищенные упаковки:**
- **Рекомендация:**  
Утилизация должна быть осуществлена в соответствии с предписаниями компетентных служб.
- **Рекомендуемые чистящие средства:** Вода - если необходимо, с добавлением чистящих средств.

### 14 Информация при перевозках (транспортировании)

- |   |   |
|---|---|
| · <b>Экологические риски:</b>                           | Неприменимо.  |
| · <b>Особые меры предосторожности для пользователей</b> | Неприменимо.  |
| · <b>Segregation groups</b>                             | (SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds |
| · <b>Stowage Category</b>                               | A   |

(Продолжение на странице 7)

# Паспорт безопасности в соответствии с ГОСТ 30333-2007

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**Торговое наименование:** *Lead Citrate Ready to use*

(Продолжение страницы 6)

· <b>Транспортировка навалом в соответствии с Приложением II MARPOL73/78 (Международная конвенция по предотвращению загрязнения вод с судов) и IBC Code (Международный кодекс перевозок опасных химических грузов наливом)</b> <i>Неприменимо.</i>	
· <b>Транспорт / дополнительная информация:</b>	
· <b>ADR</b> · <b>Освобожденные количества (EQ)</b>	Код: E1 Максимальное количество нетто на внутреннюю тару: 30 мл Максимальное количество нетто на наружную тару: 1000 мл
· <b>IMDG</b> · <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 мл Maximum net quantity per outer packaging: 1000 мл
· <b>UN "Model Regulation":</b>	<i>отпадает</i>

## 15 Информация о национальном и международном законодательстве

· **Нормы безопасности, правила охраны труда и экологические нормативы или стандарты, действующие для вещества или смеси**  
*Отсутствует какая-либо соответствующая информация.*

· **Реестр евразийской промышленной продукции**

*Все компоненты указаны в списке.*

· **Элементы маркировки в соответствии с СГС**

*Данный продукт классифицируется и маркируется в соответствии с Согласованной на глобальном уровне системой классификации и маркировки химических веществ (GHS).*

· **Пиктограммы, обозначающие опасности**



GHS07

· **Сигнальное слово** *Осторожно*

· **Предупреждения об опасности**

*Вызывает раздражение кожи.*

*Вызывает серьезное раздражение глаз.*

*Может вызывать раздражение дыхательных путей.*

· **Меры предосторожности**

*Избегать вдыхания пыли/дыма/газа/тумана/паров/распылителей жидкости.*

*Пользоваться защитными перчатками и средствами защиты глаз/лица.*

**ПРИ ВДЫХАНИИ:** *Вынести пострадавшего на свежий воздух и обеспечить ему полный покой в удобном для дыхания положении.*

**ПРИ ПОПАДАНИИ В ГЛАЗА:** *Осторожно промыть глаза водой в течение нескольких минут. Снять контактные линзы, если вы пользуетесь ими и если это легко сделать. Продолжить промывание глаз.*

*Хранить под замком.*

(Продолжение на странице 8)

**Паспорт безопасности**  
**в соответствии с ГОСТ 30333-2007**

Дата печати: 02.09.2022

Дата редактирования: 02.09.2022

**Торговое наименование: Lead Citrate Ready to use**

(Продолжение страницы 7)

Утилизировать содержимое / тару в соответствии с местными / региональными / национальными / международными предписаниями.

· **Оценка химической безопасности:** Оценка химической безопасности не проведена.

### **16 Дополнительная информация**

Данные опираются на актуальные знания, однако они не являются гарантией каких-либо конкретных свойств продукта и не устанавливают никаких действующих с юридической точки зрения договорных отношений.

· **Контактная информация:**

· **Аббревиатуры и акронимы:**

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

IMDG: International Maritime Code for Dangerous Goods

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Раздражение кожи 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

СТОМ - однократно 3: Specific target organ toxicity (single exposure) – Category 3

RU

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 02.09.2022

Revisión: 02.09.2022

### SECCIÓN 1: Identificación de la sustancia o la mezcla y de la sociedad o la empresa

#### · 1.1 Identificador del producto

· **Nombre comercial:** Lead Citrate Ready to use

· **Número del artículo:** 22410, 22410-01

· **UFI:** SMX3-X0DX-E008-EHRH

#### · 1.2 Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados

No existen más datos relevantes disponibles.

· **Utilización del producto / de la elaboración** Sustancias químicas de laboratorio

#### · 1.3 Datos del proveedor de la ficha de datos de seguridad

##### · **Fabricante/distribuidor:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

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

email: [info@emsdiasum.com](mailto:info@emsdiasum.com)

[www.emsdiasum.com](http://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](mailto: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**



GHS07

Skin Irrit. 2 H315 Provoca irritación cutánea.

Eye Irrit. 2 H319 Provoca irritación ocular grave.

STOT SE 3 H335 Puede irritar las vías respiratorias.

#### · 2.2 Elementos de la etiqueta

· **Etiquetado con arreglo al Reglamento (CE) n° 1272/2008**

El producto se ha clasificado y etiquetado de conformidad con el reglamento CLP.

· **Pictogramas de peligro**



GHS07

· **Palabra de advertencia** Atención

· **Indicaciones de peligro**

H315 Provoca irritación cutánea.

( se continua en página 2 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 02.09.2022

Revisión: 02.09.2022

**Nombre comercial:** *Lead Citrate Ready to use*

( se continua en página 1 )

H319 Provoca irritación ocular grave.

H335 Puede irritar las vías respiratorias.

· **Consejos de prudencia**

P261 Evitar respirar el polvo/el humo/el gas/la niebla/los vapores/el aerosol.

P280 Llevar guantes protección /equipo de protección para los ojos/ equipo de protección para la cara.

P304+P340 EN CASO DE INHALACIÓN: Transportar a la persona al aire libre y mantenerla en una posición que le facilite la respiración.

P305+P351+P338 EN CASO DE CONTACTO CON LOS OJOS: Enjuagar con agua cuidadosamente durante varios minutos. Quitar las lentes de contacto cuando estén presentes y pueda hacerse con facilidad. Proseguir con el lavado.

P405 Guardar bajo llave.

P501 Eliminar el contenido o el recipiente conforme a la reglamentación local/regional/nacional/internacional.

· **2.3 Otros peligros**

· **Resultados de la valoración PBT y mPmB**

· **PBT:** No aplicable.

· **mPmB:** No aplicable.

### SECCIÓN 3: Composición/información sobre los componentes

· **3.2 Caracterización química: Mezclas**

· **Descripción:** Mezcla formada por las sustancias especificadas a continuación con adiciones no peligrosas.

· **Componentes peligrosos:** suprimido

· **Indicaciones adicionales:** El texto de los posibles riesgos aquí indicados se puede consultar en el capítulo 16.

### SECCIÓN 4: Primeros auxilios

· **4.1 Descripción de los primeros auxilios**

· **En caso de inhalación del producto:**

Las personas desmayadas deben tenderse y transportarse de lado con la suficiente estabilidad.

· **En caso de contacto con la piel:** Lavar inmediatamente con agua y jabón y enjuagar bien.

· **En caso de con los ojos:**

Limpia los ojos abiertos durante varios minutos con agua corriente. En caso de trastornos persistentes consultar un médico.

· **En caso de ingestión:** Consultar un médico si los trastornos persisten.

· **4.2 Principales síntomas y efectos, agudos y retardados** No existen más datos relevantes disponibles.

· **4.3 Indicación de toda atención médica y de los tratamientos especiales que deban dispensarse inmediatamente** No existen más datos relevantes disponibles.

### SECCIÓN 5: Medidas de lucha contra incendios

· **5.1 Medios de extinción**

· **Sustancias extintoras apropiadas:** Combatir los incendios con medidas adaptados al ambiente circundante.

· **5.2 Peligros específicos derivados de la sustancia o la mezcla** No existen más datos relevantes disponibles.

· **5.3 Recomendaciones para el personal de lucha contra incendios**

· **Equipo especial de protección:** No se requieren medidas especiales.

ES

( se continua en página 3 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 02.09.2022

Revisión: 02.09.2022

Nombre comercial: *Lead Citrate Ready to use*

( se continua en página 2 )

### 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:**  
*Diluir con mucha agua.*  
*Evitar que penetre en la canalización /aguas de superficie /agua subterráneas.*
- **6.3 Métodos y material de contención y de limpieza:**  
*Quitar con material absorbente (arena, kieselgur, aglutinante de ácidos, aglutinante universal, aserrín).*  
*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**  
*Asegurar suficiente ventilación /aspiración en el puesto de trabajo.*  
*Evitar la formación de aerosoles.*
- **Prevención de incendios y explosiones:** *No se requieren medidas especiales.*
- **7.2 Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades**
- **Almacenamiento:**
- **Exigencias con respecto al almacén y los recipientes:** *No se requieren medidas especiales.*
- **Normas en caso de un almacenamiento conjunto:** *No es necesario.*
- **Indicaciones adicionales sobre las condiciones de almacenamiento:**  
*Mantener el recipiente cerrado herméticamente.*
- **7.3 Usos específicos finales** *No existen más datos relevantes disponibles.*

### SECCIÓN 8: Controles de exposición/protección individual

- **8.1 Parámetros de control**
- **Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**  
*Sin datos adicionales, ver punto 7.*
- **Componentes con valores límite admisibles que deben controlarse en el puesto de trabajo:**  
*El producto no contiene cantidades relevantes de sustancias con valores límite que exijan un control en el puesto de trabajo.*
- **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.*  
*Evitar el contacto con los ojos y la piel.*
- **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.*

( se continua en página 4 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 02.09.2022

Revisión: 02.09.2022

Nombre comercial: Lead Citrate Ready to use

( se continua en página 3 )

### · Protección de manos:



Guantes de protección

El material del guante deberá ser impermeable y resistente al producto / sustancia / preparado.

Ante la ausencia de tests específicos, no se puede recomendar ningún material específico para guantes de protección contra el producto / preparado / mezcla de sustancias químicas.

Selección del material de los guantes en función de los tiempos de rotura, grado de permeabilidad y degradación.

### · Material de los guantes

La elección del guante adecuado no depende únicamente del material, sino también de otras características de calidad, que pueden variar de un fabricante a otro. Teniendo en cuenta que el producto está fabricado a partir de diferentes materiales, su calidad no puede ser evaluada de antemano, de modo que los guantes deberán ser controlados antes de su utilización.

### · 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:



Gafas de protección herméticas

## SECCIÓN 9: Propiedades físicas y químicas

### · 9.1 Información sobre propiedades físicas y químicas básicas

#### · Datos generales

##### · Aspecto:

Forma:

Líquido

Color:

Transparente

##### · Olor:

No característico.

##### · Umbral olfativo:

No determinado.

##### · valor pH a 20 °C:

7

#### · Cambio de estado

Punto de fusión/punto de congelación:

0 °C

Punto inicial de ebullición e intervalo de ebullición:

100 °C

##### · Punto de inflamación:

No aplicable.

##### · Inflamabilidad (sólido, gas):

No aplicable.

##### · Temperatura de descomposición:

No determinado.

##### · Temperatura de auto-inflamación:

El producto no es autoinflamable.

##### · Propiedades explosivas:

El producto no es explosivo.

##### · Límites de explosión:

Inferior:

No determinado.

Superior:

No determinado.

##### · Presión de vapor a 20 °C:

23 hPa

##### · Densidad a 20 °C:

1 g/cm<sup>3</sup>

( se continua en página 5 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 02.09.2022

Revisión: 02.09.2022

Nombre comercial: *Lead Citrate Ready to use*

( se continua en página 4 )

· <i>Densidad relativa</i>	<i>No determinado.</i>
· <i>Densidad de vapor</i>	<i>No determinado.</i>
· <i>Tasa de evaporación:</i>	<i>No determinado.</i>
· <i>Solubilidad en / miscibilidad con agua:</i>	<i>Completamente mezclable.</i>
· <i>Coefficiente de reparto: n-octanol/agua:</i>	<i>No determinado.</i>
· <i>Viscosidad:</i>	
<i>Dinámica:</i>	<i>No determinado.</i>
<i>Cinemática:</i>	<i>No determinado.</i>
· <i>Concentración del disolvente:</i>	
<i>Agua:</i>	<i>97,0 %</i>
<i>VOC (CE)</i>	<i>0,00 %</i>
<i>Contenido de cuerpos sólidos:</i>	<i>0,0 %</i>
· <i>9.2 Otros datos</i>	<i>No existen más datos relevantes disponibles.</i>

### SECCIÓN 10: Estabilidad y reactividad

- *10.1 Reactividad* *No existen más datos relevantes disponibles.*
- *10.2 Estabilidad química*
- *Descomposición térmica / condiciones que deben evitarse:* *No se descompone al emplearse adecuadamente.*
- *10.3 Posibilidad de reacciones peligrosas* *No se conocen reacciones peligrosas.*
- *10.4 Condiciones que deben evitarse* *No existen más datos relevantes disponibles.*
- *10.5 Materiales incompatibles:* *No existen más datos relevantes disponibles.*
- *10.6 Productos de descomposición peligrosos:* *No se conocen productos de descomposición peligrosos.*

### SECCIÓN 11: Información toxicológica

- *11.1 Información sobre los efectos toxicológicos*
- *Toxicidad aguda* *A la vista de los datos disponibles, no se cumplen los criterios de clasificación.*
- *Efecto estimulante primario:*
- *Corrosión o irritación cutáneas*  
*Provoca irritación cutánea.*
- *Lesiones o irritación ocular graves*  
*Provoca irritación ocular grave.*
- *Sensibilización respiratoria o cutánea*  
*A la vista de los datos disponibles, no se cumplen los criterios de clasificación.*
- *Indicaciones toxicológicas adicionales:*
- *Efectos CMR (carcinogenicidad, mutagenicidad y toxicidad para la reproducción)*
- *Mutagenicidad en células germinales*  
*A la vista de los datos disponibles, no se cumplen los criterios de clasificación.*
- *Carcinogenicidad* *A la vista de los datos disponibles, no se cumplen los criterios de clasificación.*
- *Toxicidad para la reproducción* *A la vista de los datos disponibles, no se cumplen los criterios de clasificación.*
- *Toxicidad específica en determinados órganos (STOT) – exposición única*  
*Puede irritar las vías respiratorias.*
- *Toxicidad específica en determinados órganos (STOT) – exposición repetida*  
*A la vista de los datos disponibles, no se cumplen los criterios de clasificación.*

( se continua en página 6 )



# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 02.09.2022

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Nombre comercial: *Lead Citrate Ready to use*

( se continua en página 5 )

· **Peligro de aspiración** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

### SECCIÓN 12: Información ecológica

· **12.1 Toxicidad**· **Toxicidad acuática:** No existen más datos relevantes disponibles.· **12.2 Persistencia y degradabilidad** No existen más datos relevantes disponibles.· **12.3 Potencial de bioacumulación** No existen más datos relevantes disponibles.· **12.4 Movilidad en el suelo** No existen más datos relevantes disponibles.· **Indicaciones medioambientales adicionales:**· **Indicaciones generales:**

Nivel de riesgo para el agua 1 (autoclasiificación): escasamente peligroso para el agua

En estado no diluido o no neutralizado, no dejar que se infiltre en aguas subterráneas, aguas superficiales o en alcantarillados.

· **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.· **Producto de limpieza recomendado:** Agua, eventualmente añadiendo productos de limpieza.

### SECCIÓN 14: Información relativa al transporte

· **14.5 Peligros para el medio ambiente:**

No aplicable.

· **14.6 Precauciones particulares para los usuarios**· **Segregation groups**

No aplicable.

(SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds

· **Stowage Category**

A

· **14.7 Transporte a granel con arreglo al anexo II del Convenio MARPOL y el Código IBC**

No aplicable.

· **Transporte/datos adicionales:**· **ADR**· **Cantidades exceptuadas (EQ)**

Código: E1

Cantidad neta máxima por envase interior: 30 ml

Cantidad neta máxima por embalaje exterior: 1000 ml

· **IMDG**· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

( se continua en página 7 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 02.09.2022

Revisión: 02.09.2022

Nombre comercial: *Lead Citrate Ready to use*

( se continua en página 6 )

· "Reglamentación Modelo" de la UNECE: *suprimido*

### SECCIÓN 15: Información reglamentaria

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

· **Directiva 2012/18/UE**

· **Sustancias peligrosas nominadas - ANEXO I** ninguno de los componentes está incluido en una lista

· **REGLAMENTO (CE) n° 1907/2006 ANEXO XVII** Restricciones: 3

· **Directiva 2011/65/UE sobre restricciones a la utilización de determinadas sustancias peligrosas en aparatos eléctricos y electrónicos - Anexo II**

*ninguno de los componentes está incluido en una lista*

· **REGLAMENTO (UE) 2019/1148**

· **Anexo I - PRECURSORES DE EXPLOSIVOS RESTRINGIDOS (Valor límite superior a efectos de la concesión de licencias con arreglo al artículo 5, apartado 3)**

*ninguno de los componentes está incluido en una lista*

· **Anexo II - PRECURSORES DE EXPLOSIVOS NOTIFICABLES**

*ninguno de los componentes está incluido en una lista*

· **Reglamento (CE) no 273/2004 sobre precursores de drogas**

*ninguno de los componentes está incluido en una lista*

· **Reglamento (CE) N o 111/2005 por el que establecen normas para la vigilancia del comercio de precursores de drogas entre la Comunidad y terceros países**

*ninguno de los componentes está incluido en una lista*

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

### SECCIÓN 16: Otra información

Los datos se fundan en el estado actual de nuestros conocimientos, pero no constituyen garantía alguna de cualidades del producto y no generan ninguna relación jurídica contractual.

· **Abreviaturas y acrónimos:**

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

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Corrosión o irritación cutáneas – Categoría 2

Eye Irrit. 2: Lesiones oculares graves o irritación ocular – Categoría 2

STOT SE 3: Toxicidad específica en determinados órganos ( exposición única) – Categoría 3

# แผ่นข้อมูลความปลอดภัย

## มาตรฐาน GHS

วันที่พิมพ์ 2022.09.02

การปรับปรุงใหม่ : 2022.09.02

### 1 การปฐษึสารเดี่ยวหรือสารผสม และผู้ผลิต

- 1.1 ลักษณะเฉพาะของผลิตภัณฑ์
- ชื่อทางการค้า Lead Citrate Ready to use
- เลขที่รายชื่อ 22410, 22410-01
- 1.2 สารหรือสารผสมที่เกี่ยวข้องที่ระบุให้ใช้และที่ไม่ควรรให้ใช้ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- การประยุกต์ใช้สาร/ การทำ เคมีภัณฑ์ห้องทดลอง
- 1.3 รายละเอียดของผู้จัดหาข้อมูลด้านความปลอดภัย
- ผู้ผลิต/ ผู้จัดหา  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- ข้อมูลรายละเอียดเพิ่มเติมหาได้จาก Product safety department
- 1.4 หมายเลขโทรศัพท์ฉุกเฉิน:  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 การปฐษึความเป็นอันตราย

- 2.1 การจำแนกประเภทของสารหรือสารผสม
- การแบ่งประเภทตามข้อบ่งชี้หรือซีทีไอซ์ที่ 1272/2008



Skin Irrit. 2 H315 เป็นสาเหตุให้เกิดการระคายเคืองผิวหนัง  
Eye Irrit. 2 H319 เป็นสาเหตุให้เกิดการระคายเคืองอย่างร้ายแรงที่ตา  
STOT SE 3 H335 อาจเป็นสาเหตุให้เกิดการระคายเคืองต่อระบบหายใจ

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



GHS07

- สัญญาณคำ ค่าเตือน !
- ประกาศสิ่งที่เป็นอันตราย  
H315 เป็นสาเหตุให้เกิดการระคายเคืองผิวหนัง  
H319 เป็นสาเหตุให้เกิดการระคายเคืองอย่างร้ายแรงที่ตา  
H335 อาจเป็นสาเหตุให้เกิดการระคายเคืองต่อระบบหายใจ
- ประกาศการป้องกันระมัดระวังภัย  
P261 หลีกเลี่ยงการสูดหายใจเอาฝุ่น/ ไอสาร/ แกส/ หมอก/ไอ/ ละอองฟน  
P280 สวมถุงมือป้องกัน/ที่ป้องกันตา/ที่ป้องกันหน้า  
P304+P340 หากสูดดมเข้าไป: ย้ายบุคคลไปยังที่มีอากาศบริสุทธิ์ และหายใจได้สะดวก  
P305+P351+P338 หากเข้าตา : ชะด้วยน้ำอย่างระมัดระวังเป็นเวลาหลายๆนาทีถอดคอนแทกซ์เลนส์ถ้ายังอยู่ที่เดิมและสะดวกที่จะทำก็ให้ชะล้างต่อไป
- P405 เก็บในที่ปลอดภัยแฉปิด
- P501 ทิ้งสิ่งทีบรรจุ/ภาชนะทีบรรจุตามกฎหมายของท้องถิ่น/แคว้น/ในประเทศ/ระหว่างประเทศ

(ต่อที่หน้า 2)

# แผนข้อมูลความปลอดภัย

## มาตามจีเอส

วันที่พิมพ์ 2022.09.02

การปรับปรุงใหม่ : 2022.09.02

### ชื่อทางการค้า Lead Citrate Ready to use

(ต่อหน้า 1)

- 2.3 อันตรายอื่นๆ
- ผลของ PBT และการประเมิน vPvB
- PBT: ไม่สามารถใช้ได้
- vPvB: ไม่สามารถใช้ได้

### 3 องค์ประกอบและข้อมูลเกี่ยวกับส่วนผสม

- 3.2 คุณลักษณะทางเคมี: ส่วนผสม
- คำอธิบาย ส่วนผสมของสารในรายการข้างล่างพร้อมสารเติมแต่งที่ไม่เป็นอันตราย
- ส่วนประกอบที่มีอันตราย ยกเลิก
- ข้อมูลรายละเอียดเสริม สำหรับข้อความที่ระบุในรายการวลีความเสี่ยงที่อ้างอิงถึงในส่วนที่ 16

### 4 มาตรการปฐมพยาบาล

- 4.1 คำอธิบายถึงมาตรการปฐมพยาบาล
- หลังจากการสูดหายใจเข้าไป ในกรณีที่คุณไม่รู้สึกตัวให้ขนย้ายคนไปอย่างมั่นคงในท่าตะแคงด้านข้าง
- หลังจากการสัมผัสผิวหนัง ล้างด้วยน้ำและสบู่แล้วฟอกให้ทั่วทันที
- หลังจากการสัมผัสสูดดม ชะตาที่เปิดอยู่ใต้น้ำที่กำลังไหลเป็นเวลาหลายนาทีถ้าอาการไม่ดีขึ้นให้ปรึกษาแพทย์
- หลังจากการกลืนเข้าไป: ถ้าอาการยังไม่บรรเทาให้ปรึกษาแพทย์
- 4.2 อาการสำคัญส่วนใหญ่และผลกระทบ ทั้งชนิดเฉียบพลันและค่อยๆ แสดงอาการ
- ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 4.3 ช่องข้อห้ามของการที่ต้องเข้ารับการรักษาจากแพทย์ทันทีและการบำบัดพิเศษที่จำเป็น
- ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

### 5 มาตรการพญเพลิง

- 5.1 สารที่ใช้ดับเพลิง
- สารดับเพลิงที่เหมาะสม ใช้วิธีดับเพลิงที่เหมาะสมกับสภาพแวดล้อม
- 5.2 อันตรายเฉพาะอย่างที่เกิดจากสารหรือส่วนผสม ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 5.3 คำแนะนำสำหรับพนักงานดับเพลิง
- อุปกรณ์ป้องกันภัย ไม่ต้องมีมาตรการพิเศษ

### 6 มาตรการจัดการเมื่อมีการหกรั่วไหลของสาร

- 6.1 การป้องกันส่วนบุคคล อุปกรณ์ป้องกัน และขั้นตอนดำเนินการเมื่อเกิดกรณีฉุกเฉิน ไม่ได้กำหนด
- 6.2 การให้ความคุ้มครองสิ่งแวดล้อมล่วงหน้า: ทำให้เจือจางด้วยน้ำมากๆ
- อย่าปล่อยให้เข้าไปในท่อน้ำทิ้ง/ น้ำบนดินหรือใต้ดิน
- 6.3 วิธีดำเนินการและวัสดุสำหรับการบรรจและทำความสะอาด: ดูฉบับด้วยวัสดุที่สามารถยึดของเหลวไว้ (ทรายโดอะไตไมท์ตัวยึดเกาะกรดตัวยึดต่างๆไปซีลีย)
- ตรวจสอบให้แน่ใจว่ามีสารระบายอากาศที่ดีพอ
- 6.4 การอ้างอิงถึงส่วนอื่น
- ดูข้อมูลรายละเอียดเรื่องความปลอดภัยในการขนถ่ายจากส่วนที่ 7
- ดูข้อมูลรายละเอียดเรื่องอุปกรณ์ป้องกันส่วนบุคคลจากส่วนที่ 8
- ดูข้อมูลรายละเอียดเรื่องการกำจัดจากส่วนที่ 13

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(ต่อหน้า 3)

# แผนข้อมูลความปลอดภัย

## มาตรฐาน GHS

วันที่พิมพ์ 2022.09.02

การปรับปรุงใหม่ : 2022.09.02

ชื่อทางการค้า Lead Citrate Ready to use

(ต่อที่หน้า 2)

### 7 การขนถ่าย เคลื่อนย้าย ใช้งาน และเก็บรักษา

- 7.1 การป้องกันล่วงหน้าสำหรับการจัดการด้านความปลอดภัย ทำให้แน่ใจว่าสถานที่ทำงานมีการระบายอากาศ/ ไอเสียที่ดี ป้องกันการเกิดละอองสารฟุ้ง
- ข้อมูลรายละเอียดเกี่ยวกับการป้องกันอัคคีภัยและการระเบิด ไม่มีมาตรการพิเศษ
- 7.2 เงื่อนไขในการเก็บรักษาอย่างปลอดภัย, รวมถึงสิ่งที่เข้ากันไม่ได้ใดๆ
- การจัดเก็บ
- ข้อกำหนดที่ต้องปฏิบัติตามสำหรับห้องเก็บและภาชนะบรรจุ ไม่มีข้อกำหนดพิเศษ
- ข้อมูลรายละเอียดด้านการจัดเก็บในสถานที่จัดเก็บรวม ไม่ได้กำหนด
- ข้อมูลรายละเอียดเพิ่มเติมด้านสภาพการจัดเก็บ เก็บโดยปิดผนึกอย่างแน่นหนา
- 7.3 การระบุถึงการสิ้นสุดการใช้ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

### 8 การควบคุมการสัมผัสและการป้องกันส่วนบุคคล

- 8.1 การควบคุมตัวแปร
- ข้อมูลรายละเอียดเสริมสำหรับการออกแบบสิ่งอำนวยความสะดวกทางเทคนิค ไม่มีข้อมูลนอกเหนือจากนี้ดูรายการ 7
- ส่วนผสมพร้อมค่าขอบเขตที่ต้องเฝ้าดูในสถานที่ปฏิบัติงาน ผลิตภัณฑ์ไม่ได้มีปริมาณวัสดุใดๆมากพอจนถึงค่าวิกฤติที่จะต้องมีการติดตามในสถานที่ทำงาน
- ข้อมูลรายละเอียดเสริม รายการถูกต้องระหว่างที่จัดทำโดยอาศัยการใช้งานเป็นหลัก
- 8.2 การควบคุมการสัมผัส
- อุปกรณ์ป้องกันภัยส่วนบุคคล
- มาตรการการป้องกันและสุขอนามัยทั่วไป
- เก็บให้ห่างจากสิ่งของที่เป็นอาหาร เครื่องดื่ม และอาหารสัตว์
- ให้ถอดเสื้อผ้าที่เปื้อนและเช็ดออกทันที
- ล้างมือก่อนที่จะหยุดพักและเมื่อสิ้นสุดเวลาทำงาน
- หลีกเลี่ยงการสัมผัสถูกตาและผิวหนัง
- การป้องกันการสูดหายใจเข้าไป
- ในกรณีที่อยู่เป็นเวลาสั้นหรืออากาศเป็นพิษระดับต่ำ ใช้หน้ากากกรองเพื่อช่วยหายใจในกรณีที่มีความเข้มข้นสูงหรืออยู่เป็นเวลานาน ให้ใช้เครื่องป้องกันที่มีอุปกรณ์ช่วยหายใจในตัว
- การป้องกันมือ



ถุงมือป้องกัน

วัสดุของถุงมือจะต้องไม่ให้อากาศผ่านเข้าออกและทนทานต่อผลิตภัณฑ์/ สาร/ การผลิต เนื่องจากขาดการทดสอบจึงไม่มีคำแนะนำสำหรับวัสดุที่ใช้ทำถุงมือสำหรับผลิตภัณฑ์/ การผลิต/ ของผสมเคมี

- เลือกวัสดุสำหรับถุงมือโดยพิจารณาจากเวลาที่ใช้ในการซึมผ่านอัตราการแพร่และการเสื่อม
- วัสดุที่ใช้ทำถุงมือ
- การเลือกใช้ถุงมือที่เหมาะสมไม่เพียงแต่ขึ้นอยู่กับวัสดุแต่ยังขึ้นกับมาตรฐานด้านคุณภาพและข้อแตกต่างระหว่างผู้ผลิตแต่ละแห่ง โดยที่ผลิตภัณฑ์เตรียมมาจากสารหลายชนิดความทนทานของวัสดุถุงมือไม่สามารถที่จะคำนวณล่วงหน้า ดังนั้นจึงต้องตรวจสอบกับการใช้งาน
- เวลาที่ใช้ในการทะลุผ่านวัสดุที่ใช้ทำถุงมือ
- ผู้ผลิตถุงมือป้องกันจะต้องทดสอบหาเวลาแน่นอนที่ใช้ในการทะลุผ่านและจะต้องมีการตรวจสอบติดตาม

(ต่อที่หน้า 4)

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# แผ่นข้อมูลความปลอดภัย

## มาตรฐาน GHS

วันที่พิมพ์ 2022.09.02

การปรับปรุงใหม่ : 2022.09.02

### ชื่อทางการค้า Lead Citrate Ready to use

#### · การป้องกันตา

(ต่อที่หน้า 3)



แว่นตาที่ขอบปิดสนิท

## 9 คุณสมบัติทางกายภาพและทางเคมี

<ul style="list-style-type: none"> <li>· 9.1 ข้อมูลคุณสมบัติพื้นฐานทางกายภาพและเคมี</li> <li>· ข้อมูลรายละเอียดทั่วไป</li> <li>· ลักษณะ :               <ul style="list-style-type: none"> <li>· รูปลักษณะ สี ของเหลว โปร่งใส</li> <li>· กลิ่น กลิ่นกลิ่น ไม่มีลักษณะพิเศษ</li> <li>· เกณฑ์กลิ่น : ไม่ได้กำหนดไว้.</li> </ul> </li> </ul>	
ค่าค่า pH ที่ 20 °C	7
<ul style="list-style-type: none"> <li>· การเปลี่ยนสภาวะ               <ul style="list-style-type: none"> <li>จุดหลอมเหลว/ ขอบเขตการหลอมละลาย 0 °C</li> <li>จุดเดือด/ ขอบเขตการเดือด 100 °C</li> </ul> </li> <li>· จุดวาบไฟ ไม่สามารถใช้ได้</li> <li>· ความสามารถติดไฟ (ของแข็งแกส) ไม่สามารถใช้ได้</li> <li>· อุณหภูมิสลายตัว ไม่ได้กำหนดไว้.</li> <li>· การเผาไหม้ด้วยตัวเอง ผลิตภัณฑ์ไม่เป็นสารจุดไฟติดด้วยตัวเอง</li> <li>· อันตรายจากการระเบิด ผลิตภัณฑ์ไม่ได้มีอันตรายจากการระเบิด</li> <li>· ขอบเขตการระเบิด               <ul style="list-style-type: none"> <li>· ขั้นต่ำ ไม่ได้กำหนดไว้.</li> <li>· ขั้นสูง ไม่ได้กำหนดไว้.</li> </ul> </li> <li>· ความดันไอ ที่ 20 °C 23 hPa</li> <li>· ความหนาแน่น ที่ 20 °C 1 g/cm<sup>3</sup></li> <li>· ความหนาแน่นสัมพัทธ์ ไม่ได้กำหนดไว้.</li> <li>· ความหนาแน่นของไอ ไม่ได้กำหนดไว้.</li> <li>· อัตราการระเหย ไม่ได้กำหนดไว้.</li> <li>· ความสามารถในการละลายใน / ความสามารถผสมเป็นสารละลายเนื้อเดียวทุกส่วนผสมกับ น้ำ น้ำ ผสมกันได้อย่างเต็มที่</li> <li>· สัมประสิทธิ์การแยกคัตอิน(เอ็นเอ็ชคทานอลล์/น้ำ) ไม่ได้กำหนดไว้.</li> <li>· ความหนืด               <ul style="list-style-type: none"> <li>(ไดนามิค) พลศาสตร์ ไม่ได้กำหนดไว้.</li> <li>(คิเนเมติก) จลนศาสตร์ ไม่ได้กำหนดไว้.</li> </ul> </li> <li>· ปริมาณส่วนประกอบตัวทำละลาย               <ul style="list-style-type: none"> <li>น้ำ น้ำ 97.0 %</li> <li>VOC (EC) 0.00 %</li> </ul> </li> <li>· ส่วนประกอบที่เป็นของแข็ง 0.0 %</li> </ul>	

(ต่อที่หน้า 5)

# แผนข้อมูลความปลอดภัย

## มาตาม GHS

วันที่พิมพ์ 2022.09.02

การปรับปรุงใหม่ : 2022.09.02

ชื่อทางการค้า Lead Citrate Ready to use

(ต่อที่หน้า 4)

· 9.2 ข้อมูลอื่นๆ

ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

## 10 ความเสถียรและการเกิดปฏิกิริยา

- 10.1 ปฏิกิริยาโต้ตอบ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 10.2 เสถียรภาพทางเคมี
- การสลายตัวด้วยความร้อน / เงื่อนไขที่ต้องหลีกเลี่ยง ไม่มีการสลายตัวถ้าใช้ตามรายละเอียดที่ระบุไว้
- 10.3 ความเป็นไปได้ของการเกิดปฏิกิริยาอันตราย ไม่มีปฏิกิริยาเป็นอันตรายที่รู้จัก
- 10.4 เงื่อนไขเพื่อการหลีกเลี่ยง ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 10.5 วัสดุที่เข้ากันไม่ได้: ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 10.6 อันตรายจากการสลายตัวของผลิตภัณฑ์: ไม่มีสารจากการสลายตัวที่เป็นอันตรายที่รู้จัก

## 11 ข้อมูลด้านพิษวิทยา

- 11.1 ข้อมูลเกี่ยวกับผลกระทบทางพิษวิทยา
- ความเป็นพิษอย่างสูดดม: ตามข้อมูลที่มีอยู่ ไม่ตรงตามเกณฑ์การจัดหมวดหมู่
- อาการระคายเคืองเบื้องต้น
- บวมผิวหนัง
- เป็นสาเหตุให้เกิดการระคายเคืองผิวหนัง
- ที่ดวงตา
- เป็นสาเหตุให้เกิดการระคายเคืองอย่างร้ายแรงที่ตา
- การทำให้แพ้ ตามข้อมูลที่มีอยู่ ไม่ตรงตามเกณฑ์การจัดหมวดหมู่
- ข้อมูลรายละเอียดเสริมเกี่ยวกับพิษวิทยา
- ผลกระทบ CMR (การทำให้เกิดมะเร็งการผ่าเหล่าและพิษต่อการสืบพันธุ์)
- การผ่าเหล่าในเซลล์สืบพันธุ์ ตามข้อมูลที่มีอยู่ ไม่ตรงตามเกณฑ์การจัดหมวดหมู่
- การกระตุ้นให้เกิดมะเร็ง ตามข้อมูลที่มีอยู่ ไม่ตรงตามเกณฑ์การจัดหมวดหมู่
- พิษต่อระบบสืบพันธุ์ ตามข้อมูลที่มีอยู่ ไม่ตรงตามเกณฑ์การจัดหมวดหมู่
- ความเป็นพิษต่ออวัยวะเป้าหมายเฉพาะ – การสัมผัสในครรภ์
- อาจเป็นสาเหตุให้เกิดการระคายเคืองต่อระบบหายใจ
- ความเป็นพิษต่ออวัยวะเป้าหมายเฉพาะ – การสัมผัสซ้ำหลาย ตามข้อมูลที่มีอยู่ ไม่ตรงตามเกณฑ์การจัดหมวดหมู่
- อันตรายต่อระบบหายใจ ตามข้อมูลที่มีอยู่ ไม่ตรงตามเกณฑ์การจัดหมวดหมู่

## 12 ข้อมูลด้านนิเวศวิทยา

- 12.1 ความเป็นพิษ
- ความเป็นพิษที่เกี่ยวกับน้ำ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 12.2 การคงอยู่และการย่อยสลาย ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 12.3 การสะสมทางชีวภาพที่อาจเกิดขึ้น ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 12.4 การเปลี่ยนแปลงในดิน ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- ข้อมูลรายละเอียดเสริมเกี่ยวกับนิเวศวิทยา
- หมายเหตุทั่วไป
- เป็นอันตรายต่อน้ำชั้น 1 (กฎข้อบังคับของเยอรมัน)(การประเมินค่าด้วยตัวเอง):เป็นอันตรายเล็กน้อยกับน้ำ
- อย่าย่ำเหยียบให้ผลิตภัณฑ์ที่ยังไม่ได้เจือจางหรือผลิตภัณฑ์เป็นจำนวนมาก ไปถึงน้ำผิวดินเส้นทางน้ำหรือระบบระบายน้ำ
- สืบ
- 12.5 ผลของ PBT และการประเมิน vPvB
- PBT: ไม่สามารถใช้ได้
- vPvB: ไม่สามารถใช้ได้

(ต่อที่หน้า 6)

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# แผนข้อมูลความปลอดภัย

## มาตรฐาน GHS

วันที่พิมพ์ 2022.09.02

การปรับปรุงใหม่ : 2022.09.02

ชื่อทางการค้า Lead Citrate Ready to use

(ต่อที่หน้า 5)

- 12.6 ผลข้างเคียงอื่นๆ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

### 13 ข้อพิจารณาในการกำจัด

- 13.1 วิธีการกำจัดของเสีย
- คำแนะนำ ต้องไม่ทิ้งไปพร้อมกับขยะจากบ้านเรือนอย่าปล่อยให้ผลิตภัณฑ์เข้าถึงระบบระบายน้ำเสีย
- ภาชนะบรรจุที่ยังไม่ได้ล้างทำความสะอาด
- คำแนะนำ การกำจัดจะต้องทำตามกฎระเบียบที่เป็นทางการ
- สารทำความสะอาดที่แนะนำ นำถ้าจำเป็นใช้คู่กับสารทำความสะอาด

### 14 ข้อมูลการขนส่ง

· 14.5 สิ่งที่เป็นอันตรายต่อสภาพแวดล้อม	ไม่สามารถใช้ได้
· 14.6 การป้องกันพิเศษล่วงหน้าสำหรับผู้ใช้	ไม่สามารถใช้ได้
· Segregation groups	(SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG9) lead and its compounds
· Stowage Category	A
· 14.7 การขนส่งขนาดใหญ่ตามภาคผนวกของของ MARPOL73/78 และรหัส IBC	ไม่สามารถใช้ได้
· การขนส่ง/ข้อมูลรายละเอียดเสริม	
· ADR	
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· IMDG	
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· “กฎระเบียบต้นแหล่งของข้อก	ยกเลิก

### 15 ข้อมูลด้านกฎข้อบังคับ

- 15.1 ความปลอดภัย สุขภาพและระเบียบ/กฎหมายสิ่งแวดล้อมโดยเฉพาะของสารหรือสารผสม
- ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- บัญชีรายชื่อวัตถุอันตราย

· กรมวิชาการเกษตร	ไม่มีส่วนผสมอยู่ในรายการ
· กรมประมง	ไม่มีส่วนผสมอยู่ในรายการ
· กรมปศุสัตว์	ไม่มีส่วนผสมอยู่ในรายการ
· อาหารและยา	ไม่มีส่วนผสมอยู่ในรายการ

(ต่อที่หน้า 7)



# แผ่นข้อมูลความปลอดภัย

## มาตาม GHS

วันที่พิมพ์ 2022.09.02

การปรับปรุงใหม่ : 2022.09.02

### ชื่อทางการค้า Lead Citrate Ready to use

(ต่อที่หน้า 6)

· **กรมโรงงานอุตสาหกรรม**

ไม่มีส่วนผสมที่อยู่ในรายการ

· **กรมธุรกิจพลังงาน**

ไม่มีส่วนผสมที่อยู่ในรายการ

· **15.2 การประเมินความปลอดภัยของสารเคมี:** ไม่ได้ดำเนินการตามการประเมินความปลอดภัยของสารเคมี

### 16 ข้อมูลอื่นๆ

ข้อมูลรายละเอียดนี้ใช้ความรู้ปัจจุบันของเราเป็นหลักอย่างไรก็ตามข้อมูลนี้ไม่ใช่การรับประกันจากสถาบันต่อคุณสมบัติเฉพาะของผลิตภัณฑ์และไม่สามารถยืนยันการบังคับใช้ตามกฎหมายที่เกี่ยวข้องกับสัญญา

· **คำย่อและชื่อย่อที่ผสมขึ้น**

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

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

TH