

safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Lead(II) acetate, basic ≥33 %, p.a., ACS

article number: **2559**
Version: **1.0 en**

date of compilation: 2016-06-14

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

1.1 Product identifier

| | |
|---------------------------------|------------------------------------|
| Identification of the substance | Lead(II) acetate, basic |
| Article number | 2559 |
| Registration number (REACH) | This information is not available. |
| Index No | 082-007-00-9 |
| EC number | 215-630-3 |
| CAS number | 1335-32-6 |

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

Identified uses: laboratory chemical

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG
Schoemperlenstr. 3-5
D-76185 Karlsruhe
Germany

Telephone: +49 (0) 721 - 56 06 0

Telefax: +49 (0) 721 - 56 06 149

e-mail: sicherheit@carlroth.de

Website: www.carlroth.de

Competent person responsible for the safety data sheet : Department Health, Safety and Environment

e-mail (competent person) : sicherheit@carlroth.de

1.4 Emergency telephone number

Emergency information service **Poison Centre Munich: +49/(0)89 19240**

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

| Classification acc. to GHS | | | |
|----------------------------|---|---------------------------|------------------|
| Section | Hazard class | Hazard class and category | Hazard statement |
| 3.6 | carcinogenicity | (Carc. 2) | H351 |
| 3.7 | reproductive toxicity | (Repr. 1A) | H360Df |
| 3.9 | specific target organ toxicity - repeated exposure | (STOT RE 2) | H373 |
| 4.1A | hazardous to the aquatic environment - acute hazard | (Aquatic Acute 1) | H400 |
| 4.1C | hazardous to the aquatic environment - chronic hazard | (Aquatic Chronic 1) | H410 |

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Remarks

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word

Danger

Pictograms



Hazard statements

| | |
|--------|--|
| H351 | Suspected of causing cancer. |
| H360Df | May damage the unborn child. Suspected of damaging, fertility. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary statements

Precautionary statements - prevention

| | |
|------|---|
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260 | Do not breathe dust. |
| P273 | Avoid release to the environment. |

Precautionary statements - response

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

For professional users only

Labelling of packages where the contents do not exceed 125 ml

Signal word: **Danger**

Symbol(s)



| | |
|-----------|---|
| H351 | Suspected of causing cancer. |
| H360Df | May damage the unborn child. Suspected of damaging, fertility. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P308+P313 | IF exposed or concerned: Get medical advice/attention. |

2.3 Other hazards

There is no additional information.

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SECTION 3: Composition/information on ingredients

3.1 Substances

| | |
|-------------------|---|
| Name of substance | Lead(II) acetate, basic |
| Index No | 082-007-00-9 |
| EC number | 215-630-3 |
| CAS number | 1335-32-6 |
| Molecular formula | $\text{Pb}(\text{CH}_3\text{COO})_2 \cdot 2 \text{Pb}(\text{OH})_2$ |
| Molar mass | 807,7 g/mol |

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.

Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

Following ingestion

Rinse mouth. Do not induce vomiting. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

4.2 Most important symptoms and effects, both acute and delayed

Gastrointestinal complaints, Nausea, Vomiting

4.3 Indication of any immediate medical attention and special treatment needed

none

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings
water spray, foam, dry extinguishing powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible.

Hazardous combustion products

In case of fire may be liberated: carbon monoxide (CO), carbon dioxide (CO₂), Metal oxide smoke, toxic

5.3 Advice for firefighters

Do not allow firefighting water to enter drains or water courses. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Do not breathe dust. Avoid contact with skin, eyes and clothes.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose it.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Covering of drains.

Advices on how to clean up a spill

Take up mechanically. Control of dust.

Other information relating to spills and releases

Place in appropriate containers for disposal.

Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provide adequate ventilation.

Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice

• Ventilation requirements

Use local and general ventilation.

• Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

No data available.

Biological limit values

| Country | Name of agent | Parameter | Notation | Identifier | Value | Material | Source |
|---------|----------------|-----------|------------------------------|------------|----------|-------------|----------|
| EU | lead compounds | lead | Pb, Pb-bio-1, Pb-med-1 | BBLV | 700 µg/l | whole blood | 98/24/EC |
| GB | lead compounds | lead | Pb-bio-2, Pb-med-2, child | AL_NIR | 250 µg/l | whole blood | CLWR-NIR |
| GB | lead compounds | lead | Pb-bio-2, Pb-med-2, child | AL | 250 µg/l | whole blood | CLWR |
| GB | lead compounds | lead | Pb-bio-2, Pb-med-3, no_child | AL_NIR | 400 µg/l | whole blood | CLWR-NIR |
| GB | lead compounds | lead | Pb-bio-2, Pb-med-3, no_child | AL | 400 µg/l | whole blood | CLWR |

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| Country | Name of agent | Parameter | Notation | Identifier | Value | Material | Source |
|---------|----------------|-----------|---------------------------|------------|----------|-------------|----------|
| GB | lead compounds | lead | Pb-bio-2, Pb-med-4, young | AL_NIR | 500 µg/l | whole blood | CLWR-NIR |
| GB | lead compounds | lead | Pb-bio-2, Pb-med-4, young | AL | 500 µg/l | whole blood | CLWR |

Notation

| | |
|----------|---|
| child | Woman of reproductive capacity |
| no_child | Woman of non-reproductive capacity, men |
| Pb | Calculated as Pb (lead) |
| Pb-bio-1 | Biological monitoring must include measuring the blood-lead level (PbB) using absorption spectrometry or a method giving equivalent results. The binding biological limit value is: 70 µg Pb/100 ml blood |
| Pb-bio-2 | Biological monitoring: (a) in respect of an employee other than a young person or a woman of reproductive capacity, at least every 6 months, but where the results of the measurements for individuals or for groups of workers have shown on the previous two consecutive occasions on which monitoring was carried out a lead in air exposure greater than 0.075 mg/m ³ but less than 0.100 mg/m ³ and where the blood-lead concentration of any individual employee is less than 30 µg/dl, the frequency of monitoring may be reduced to once a year; or (b) in respect of any young person or a woman of reproductive capacity, at such intervals as the relevant doctor shall specify, being not greater than 3 months |
| Pb-med-1 | Medical surveillance is carried out if: (a) exposure to a concentration of lead in air is greater than 0,075 mg/m ³ , calculated as a time-weighted average over 40 hours per week, or (b) a blood-lead level greater than 40 µg Pb/100 ml blood is measured in individual workers |
| Pb-med-2 | Medical surveillance: in respect of a woman of reproductive capacity, 20 g/dl (blood-lead concentration) or 20 g Pb/g creatinine (urinary lead concentration) |
| Pb-med-3 | Medical surveillance: in respect of any other employee, 35 µg/dl (blood-lead concentration) or 40 µg Pb/g creatinine (urinary lead concentration) suspension level: in respect of a woman of reproductive capacity, 60 µg/dl (blood-lead concentration) or 110 µg Pb/g creatinine (urinary lead concentration) |
| Pb-med-4 | Medical surveillance: in respect of any other employee, 35 µg/dl (blood-lead concentration) or 40 µg Pb/g creatinine (urinary lead concentration) suspension level: in respect of a young person, 50 µg/dl (blood-lead concentration) or 110 µg Pb/g creatinine (urinary lead concentration) |
| young | Adolescent (young person < 18 years) |

8.2 Exposure controls

Individual protection measures (personal protective equipment)



Eye/face protection

Use safety goggle with side protection.

Skin protection

• hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

• type of material

NBR (Nitrile rubber)

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- **material thickness**

>0,11 mm.

- **breakthrough times of the glove material**

>480 minutes (permeation: level 6)

- **other protection measures**

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection

Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P2 (filters at least 94 % of airborne particles, colour code: White).

Environmental exposure controls

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

| | |
|-----------------|-------------------|
| Physical state | solid (powder) |
| Colour | white |
| Odour | odourless |
| Odour threshold | No data available |

Other physical and chemical parameters

| | |
|---|--|
| pH (value) | This information is not available. |
| Melting point/freezing point | not determined |
| Initial boiling point and boiling range | This information is not available. |
| Flash point | not applicable |
| Evaporation rate | no data available |
| Flammability (solid, gas) | Non-flammable |
| <u>Explosive limits</u> | |
| • lower explosion limit (LEL) | this information is not available |
| • upper explosion limit (UEL) | this information is not available |
| Explosion limits of dust clouds | these information are not available |
| Vapour pressure | This information is not available. |
| Density | This information is not available. |
| Vapour density | This information is not available. |
| Bulk density | 2.100 kg/m ³ |
| Relative density | Information on this property is not available. |

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Solubility(ies)

Water solubility 450 g/l at 20 °C

Partition coefficient

n-octanol/water (log KOW) This information is not available.

Auto-ignition temperature Information on this property is not available.

Decomposition temperature no data available

Viscosity not relevant (solid matter)

Explosive properties none

Oxidising properties none

9.2 Other information

There is no additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Violent reaction with: Strong oxidiser, Strong acid

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Shall not be classified as acutely toxic.

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

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Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Summary of evaluation of the CMR properties

Carcinogenicity:

Suspected of causing cancer

Reproductive toxicity

• Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

• Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

data are not available

• If in eyes

data are not available

• If inhaled

data are not available

• If on skin

data are not available

Other information

Renal impairment

SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute)

Very toxic to aquatic organisms.

Aquatic toxicity (chronic)

May cause long-term adverse effects in the aquatic environment.

12.2 Process of degradability

Theoretical Oxygen Demand: 0,05942 mg/mg
Theoretical Carbon Dioxide: 0,109 mg/mg

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

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12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Strongly hazardous to water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

SECTION 14: Transport information

| | | |
|------|--|--|
| 14.1 | UN number | 1616 |
| 14.2 | UN proper shipping name | LEAD ACETATE |
| | Hazardous ingredients | Lead(II) acetate, basic |
| 14.3 | Transport hazard class(es) | |
| | Class | 6.1 (toxic substances) |
| 14.4 | Packing group | III (substance presenting low danger) |
| 14.5 | Environmental hazards | hazardous to the aquatic environment |
| 14.6 | Special precautions for user | |
| | Provisions for dangerous goods (ADR) should be complied within the premises. | |
| 14.7 | Transport in bulk according to Annex II of MARPOL and the IBC Code | |
| | The cargo is not intended to be carried in bulk. | |
| 14.8 | Information for each of the UN Model Regulations | |
| | • Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) | |
| | UN number | 1616 |
| | Proper shipping name | LEAD ACETATE |
| | Particulars in the transport document | UN1616, LEAD ACETATE, 6.1, III, (E), environmentally hazardous |
| | Class | 6.1 |
| | Classification code | T5 |
| | Packing group | III |
| | Danger label(s) | 6.1 + "fish and tree" |

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| | |
|---|--|
| Environmental hazards | yes (hazardous to the aquatic environment) |
| Special provisions (SP) | 802(ADN) |
| Excepted quantities (EQ) | E1 |
| Limited quantities (LQ) | 5 kg |
| Transport category (TC) | 2 |
| Tunnel restriction code (TRC) | E |
| Hazard identification No | 60 |
| Emergency Action Code | 2Z |
| • International Maritime Dangerous Goods Code (IMDG) | |
| UN number | 1616 |
| Proper shipping name | LEAD ACETATE |
| Particulars in the shipper's declaration | UN1616, LEAD ACETATE, 6.1, III, MARINE POLLUTANT |
| Class | 6.1 |
| Marine pollutant | yes (hazardous to the aquatic environment) |
| Packing group | III |
| Danger label(s) | 6.1 + "fish and tree" |
| | |
| Special provisions (SP) | - |
| Excepted quantities (EQ) | E1 |
| Limited quantities (LQ) | 5 kg |
| EmS | F-A, S-A |
| Stowage category | A |
| Segregation group | 7 - Heavy metals and their salts 9 - Lead and its compounds |

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SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

- **Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC)**
Not listed.

- **Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS)**
Not listed.

- **Regulation 850/2004/EC on persistent organic pollutants (POP)**
Not listed.

- **Restrictions according to REACH, Annex XVII**
not listed

- **List of substances subject to authorisation (REACH, Annex XIV)**
not listed

- **Seveso Directive**

| 2012/18/EU (Seveso III) | | | |
|-------------------------|--|---|-------|
| No | Dangerous substance/hazard categories | Qualifying quantity (tonnes) for the application of lower and upper-tier requirements | Notes |
| E1 | environmental hazards (hazardous to the aquatic environment, cat. 1) | 100 200 | 56) |

Notation

56) Hazardous to the Aquatic Environment in category Acute 1 or Chronic 1

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II

not listed

Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)

not listed

National inventories

Substance is listed in the following national inventories:

- EINECS/ELINCS/NLP (Europe)

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

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SECTION 16: Other information

Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|----------|---|
| 98/24/EC | Council Directive on the protection of the health and safety of workers from the risks related to chemical agents at work |
| ADN | Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) |
| ADR | Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road) |
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |
| CLP | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures |
| CLWR | Control of Lead at Work Regulations |
| CLWR-NIR | Control of Lead at Work Regulations (Northern Ireland) |
| CMR | Carcinogenic, Mutagenic or toxic for Reproduction |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| EmS | Emergency Schedule |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations |
| IMDG | International Maritime Dangerous Goods Code |
| index No | the Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 |
| MARPOL | International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant") |
| NLP | No-Longer Polymer |
| PBT | Persistent, Bioaccumulative and Toxic |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail) |
| vPvB | very Persistent and very Bioaccumulative |

Key literature references and sources for data

- Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU
- Regulation (EC) No. 1272/2008 (CLP, EU GHS)

List of relevant phrases (code and full text as stated in chapter 2 and 3)

| Code | Text |
|--------|---|
| H351 | suspected of causing cancer |
| H360Df | may damage the unborn child. Suspected of damaging, fertility |
| H373 | may cause damage to organs through prolonged or repeated exposure |
| H400 | very toxic to aquatic life |
| H410 | very toxic to aquatic life with long lasting effects |

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Disclaimer

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.