

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Lead, granulated, 100 g**

Print date: 14.04.2015

Product code: 9991146

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Lead, granulated, 100 g

CAS No: 7439-92-1

EC No: 231-100-4

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Laboratory chemicals

**1.3. Details of the supplier of the safety data sheet****Seller**

Company name: CONATEX-DIDACTIC Lehrmittel GmbH

Street: Im Forstgarten 1

Place: D-66459 Kirkel

Internet: www.conatex.com

**Supplier**

Company name: Carbolution Chemicals GmbH

Street: Im Stadtwald, Gebäude A1.2

Place: D-66123 Saarbrücken

Contact person: Dr. Michael Bauer Telephone: +49 (0)681 302-71232

e-mail: michael.bauer@carbolution-chemicals.de

Internet: www.carbolution-chemicals.de

**1.4. Emergency telephone number:** +49 (0)681 302-71232**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Directive 67/548/EEC or 1999/45/EC**

Indications of danger: C3 - Carc. Cat. 3, R1 - Repr. Cat. 1, R3 - Repr. Cat. 3, Xn - Harmful, N -

Dangerous for the environment

R phrases:

May cause harm to the unborn child.

Possible risk of impaired fertility.

Danger of cumulative effects.

Limited evidence of a carcinogenic effect.

Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

Very toxic to aquatic organisms.

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

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard categories:

Reproductive toxicity: Repr. 1A

Acute toxicity: Acute Tox. 4

Acute toxicity: Acute Tox. 4

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazardous to the aquatic environment: Aquatic Acute 1 (M-Factor (self-classification) = 1)

Hazardous to the aquatic environment: Aquatic Chronic 1 (M-Factor (self-classification) = 1)

Hazard Statements:

Harmful if swallowed.

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Harmful if inhaled.  
May damage the unborn child. Suspected of damaging fertility.  
May cause damage to organs through prolonged or repeated exposure.  
Very toxic to aquatic life.  
Very toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

##### Hazardous components which must be listed on the label

Lead

Signal word:

Danger

Pictograms:

GHS07-GHS08-GHS09



##### Hazard statements

|           |  |
|-----------|--|
| H302+H332 | Harmful if swallowed or if inhaled.                                |
| H360Df    | May damage the unborn child. Suspected of damaging fertility.      |
| H373      | May cause damage to organs through prolonged or repeated exposure. |
| H410      | Very toxic to aquatic life with long lasting effects.              |

##### Precautionary statements

|           |  |
|-----------|--|
| P201      | Obtain special instructions before use.                |
| P273      | Avoid release to the environment.                      |
| P281      | Use personal protective equipment as required.         |
| P308+P313 | IF exposed or concerned: Get medical advice/attention. |
| P501      | Dispose of contents/container to ....                  |

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

|                   |       |
|-------------------|-------|
| Sum formula:      | Pb    |
| Molecular weight: | 207,2 |

##### Hazardous components

| EC No     | Chemical name   | Quantity |
|-----------|---|----------|
| CAS No    | Classification according to Directive 67/548/EEC  |          |
| Index No  | Classification according to Regulation (EC) No. 1272/2008 [CLP]   |          |
| 231-100-4 | Lead  | 100 %    |
| 7439-92-1 | Carc. Cat. 3, Repr. Cat. 1, Repr. Cat. 3, Xn - Harmful, N - Dangerous for the environment R61-62-33-40-48/20/22-50-53 |          |
|           | Repr. 1A, Acute Tox. 4, Acute Tox. 4, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 1; H360Df H302 H332 H373 H400 H410  |          |

Full text of R-, H- and EUH-phrases: see section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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**After inhalation**

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

**After contact with skin**

Wash with plenty of water. Change contaminated clothing. Medical treatment necessary.

**After contact with eyes**

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

**After ingestion**

Rinse mouth immediately and drink plenty of water. Induce vomiting when the affected person is not unconscious. Medical treatment necessary.

**4.3. Indication of any immediate medical attention and special treatment needed**

No data available

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

**5.2. Special hazards arising from the substance or mixture**

The product itself does not burn.

**5.3. Advice for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing. Full protective suit.

**Additional information**

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

**6.3. Methods and material for containment and cleaning up**

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

**Advice on protection against fire and explosion**

Only use the material in places where open light, fire and other flammable sources can be kept away.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

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#### 8.2. Exposure controls

##### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

##### Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink.

##### Eye/face protection

Eye protection: Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN): DIN EN 166

##### Hand protection

Hand protection: Single-use gloves. Before using check leak tightness / impermeability. Use gloves only once. German Industry Norms (DIN) / European Norms (EN): DIN EN 374

##### Skin protection

Body protection: Lab apron. Only wear fitting, comfortable and clean protective clothing.

##### Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Suitable respiratory protective equipment: particulates filter device (DIN EN 143).

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

|                 |                   |
|-----------------|-------------------|
| Physical state: | solid             |
| Colour:         | silver grey       |
| Odour:          | No data available |

#### Test method

pH-Value: No data available

##### Changes in the physical state

|  |                   |
|--|-------------------|
| Melting point:                           | 327,4 °C          |
| Initial boiling point and boiling range: | 1740 °C           |
| Sublimation point:                       | No data available |
| Softening point:                         | No data available |
| Flash point:                             | No data available |

##### Flammability

|        |                   |
|--------|-------------------|
| Solid: | No data available |
| Gas:   | No data available |

Lower explosion limits: No data available

Upper explosion limits: No data available

Ignition temperature: No data available

##### Auto-ignition temperature

|        |                   |
|--------|-------------------|
| Solid: | No data available |
| Gas:   | No data available |

Vapour pressure: No data available

Vapour pressure: No data available

Density: No data available

Water solubility: No data available

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|                          |                   |
|--------------------------|-------------------|
| Partition coefficient:   | No data available |
| Viscosity / dynamic:     | No data available |
| Viscosity / kinematic:   | No data available |
| Flow time:               | No data available |
| Vapour density:          | No data available |
| Evaporation rate:        | No data available |
| Solvent separation test: | No data available |
| Solvent content:         | No data available |

#### 9.2. Other information

|                |                   |
|----------------|-------------------|
| Solid content: | No data available |
|----------------|-------------------|

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No data available

#### 10.3. Possibility of hazardous reactions

No data available

#### 10.4. Conditions to avoid

No data available

#### 10.5. Incompatible materials

Oxidizing agents, strong.

#### 10.6. Hazardous decomposition products

No data available

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Toxicokinetics, metabolism and distribution

Toxicological data are not available.

##### Acute toxicity

Toxic. Acute toxicity, inhalant. Acute toxicity, dermal.

| CAS No    | Chemical name      |        |           |         |        |
|-----------|--------------------|--------|-----------|---------|--------|
|           | Exposure routes    | Method | Dose      | Species | Source |
| 7439-92-1 | Lead               |        |           |         |        |
|           | oral               | ATE    | 500 mg/kg |         |        |
|           | inhalative vapour  | ATE    | 11 mg/l   |         |        |
|           | inhalative aerosol | ATE    | 1,5 mg/l  |         |        |

##### Irritation and corrosivity

No data available

##### Sensitising effects

No data available

##### Severe effects after repeated or prolonged exposure

Danger of serious damage to health by prolonged exposure.

##### Carcinogenic/mutagenic/toxic effects for reproduction

May cause cancer. May impair fertility. May damage the unborn child.

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**Specific effects in experiment on an animal**

No data available

**Additional information on tests**

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

**Practical experience****Observations relevant to classification**

No data available

**SECTION 12: Ecological information****12.1. Toxicity**

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

**12.2. Persistence and degradability**

No data available

**12.3. Bioaccumulative potential**

No data available

**12.4. Mobility in soil**

No data available

**12.5. Results of PBT and vPvB assessment**

No data available

**12.6. Other adverse effects**

No data available

**Further information**

Do not allow to enter into surface water or drains. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Advice on disposal**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

**Waste disposal number of waste from residues/unused products**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals  
Classified as hazardous waste.

**Waste disposal number of used product**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals  
Classified as hazardous waste.

**Waste disposal number of contaminated packaging**

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances  
Classified as hazardous waste.

**Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

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**SECTION 14: Transport information****Land transport (ADR/RID)**

|  |  |
|--|--|
| <b>14.1. UN number:</b>                  | UN3077   |
| <b>14.2. UN proper shipping name:</b>    | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. |
| <b>14.3. Transport hazard class(es):</b> | 9  |
| <b>14.4. Packing group:</b>              | III  |
| Hazard label:                            | 9  |
| Classification code:                     | M7   |
| Special Provisions:                      | 274 335 601  |
| Limited quantity:                        | 5 kg   |
| Transport category:                      | 3  |
| Hazard No:                               | 90   |
| Tunnel restriction code:                 | E  |

**Other applicable information (land transport)**

E1

**Inland waterways transport (ADN)**

|  |  |
|--|--|
| <b>14.1. UN number:</b>                  | UN3077   |
| <b>14.2. UN proper shipping name:</b>    | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. |
| <b>14.3. Transport hazard class(es):</b> | 9  |
| <b>14.4. Packing group:</b>              | III  |
| Hazard label:                            | 9  |
| Classification code:                     | M7   |
| Special Provisions:                      | 274 335 601  |
| Limited quantity:                        | 5 kg   |

**Other applicable information (inland waterways transport)**

E1

**Marine transport (IMDG)**

|  |  |
|--|--|
| <b>14.1. UN number:</b>                  | UN3077   |
| <b>14.2. UN proper shipping name:</b>    | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. |
| <b>14.3. Transport hazard class(es):</b> | 9  |
| <b>14.4. Packing group:</b>              | III  |
| Hazard label:                            | 9  |
| Special Provisions:                      | 274, 335   |
| Limited quantity:                        | 5 kg   |
| EmS:                                     | F-A, S-F   |

**Other applicable information (marine transport)**

E1

**Air transport (ICAO)**

|  |  |
|--|--|
| <b>14.1. UN number:</b>                  | UN3077   |
| <b>14.2. UN proper shipping name:</b>    | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. |
| <b>14.3. Transport hazard class(es):</b> | 9  |
| <b>14.4. Packing group:</b>              | III  |
| Hazard label:                            | 9  |
| Special Provisions:                      | A97 A158 A179                                      |
| Limited quantity Passenger:              | 30 kg G  |

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|  |        |
|--|--------|
| IATA-packing instructions - Passenger: | 956    |
| IATA-max. quantity - Passenger:        | 400 kg |
| IATA-packing instructions - Cargo:     | 956    |
| IATA-max. quantity - Cargo:            | 400 kg |

**Other applicable information (air transport)**E1  
: Y956**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: yes

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information****Additional information**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

**National regulatory information**

Water contaminating class (D): 3 - highly water contaminating

**SECTION 16: Other information****Relevant R-phrases (Number and full text)**

|          |  |
|----------|--|
| 33       | Danger of cumulative effects.  |
| 40       | Limited evidence of a carcinogenic effect.   |
| 48/20/22 | Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. |
| 50       | Very toxic to aquatic organisms.   |
| 53       | May cause long-term adverse effects in the aquatic environment.  |
| 61       | May cause harm to the unborn child.  |
| 62       | Possible risk of impaired fertility.   |

**Relevant H- and EUH-phrases (Number and full text)**

|           |  |
|-----------|--|
| H302      | Harmful if swallowed.  |
| H302+H332 | Harmful if swallowed or if inhaled.                                |
| H332      | Harmful if inhaled.  |
| 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.              |