

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Lead(II) nitrate, 100 g**

Print date: 14.04.2015

Product code: 9991151

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

Lead(II) nitrate, 100 g

CAS No: 10099-74-8  
Index No: 082-001-00-6  
EC No: 233-245-9

**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: O - Oxidizing, R1 - Repr. Cat. 1, R3 - Repr. Cat. 3, Xn - Harmful, Xi - Irritant, N - Dangerous for the environment

R phrases:

May cause harm to the unborn child.  
Possible risk of impaired fertility.  
Contact with combustible material may cause fire.  
Harmful by inhalation and if swallowed.  
Danger of cumulative effects.  
Risk of serious damage to eyes.  
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:

Oxidising solid: Ox. Sol. 2  
Reproductive toxicity: Repr. 1A  
Acute toxicity: Acute Tox. 4  
Acute toxicity: Acute Tox. 4  
Serious eye damage/eye irritation: Eye Dam. 1  
Specific target organ toxicity - repeated exposure: STOT RE 2

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Hazardous to the aquatic environment: Aquatic Acute 1 (M-Factor = 1)  
 Hazardous to the aquatic environment: Aquatic Chronic 1 (M-Factor = 1)  
 Hazard Statements:  
 May intensify fire; oxidiser.  
 May damage the unborn child. Suspected of damaging fertility.  
 Harmful if swallowed.  
 Harmful if inhaled.  
 Causes serious eye damage.  
 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(II) nitrate

Signal word:

Danger

Pictograms:

GHS05-GHS07-GHS08-GHS09



##### Hazard statements

H302+H332	Harmful if swallowed or if inhaled.
H318	Causes serious eye damage.
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.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P308+P313	IF exposed or concerned: Get medical advice/attention.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Sum formula: N2O6Pb  
 Molecular weight: 331,21

##### 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]	
233-245-9	Lead(II) nitrate	100 %
10099-74-8	Repr. Cat. 1, Repr. Cat. 3, O - Oxidizing, Xn - Harmful, Xi - Irritant, N - Dangerous for the environment R61-62-08-20/22-33-41-50-53	
082-001-00-6	Ox. Sol. 2, Repr. 1A, Acute Tox. 4, Acute Tox. 4, Eye Dam. 1, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 1; H272 H360Df H302 H332 H318 H373 H400 H410	

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

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**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).

**After inhalation**

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

**After contact with skin**

Wash with plenty of water. Immediately remove any contaminated clothing, shoes or stockings. Medical treatment necessary.

**After contact with eyes**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. 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. Do NOT induce vomiting. Potential hazards: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

**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**

In case of fire: Wear self-contained breathing apparatus.

**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**

Remove all sources of ignition. Provide adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with skin, eyes and clothes. Use 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. Avoid generation of dust. Do not breathe dust.

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#### Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking.

#### 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 exhaust at critical locations. Keep in a cool place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

##### Advice on storage compatibility

Keep away from combustible material.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 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. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. 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:	colourless
Odour:	No data available

#### Test method

pH-Value: No data available

##### Changes in the physical state

Melting point:	470 °C
Initial boiling point and boiling range:	No data available
Sublimation point:	No data available
Softening point:	No data available
Flash point:	No data available

##### Flammability

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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
<b>Auto-ignition temperature</b>	
Solid:	No data available
Gas:	No data available
Vapour pressure:	No data available
Vapour pressure:	No data available
Density:	4,53 g/cm <sup>3</sup>
Water solubility:	500 g/L
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
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### **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**

Risk of explosion by shock, friction, fire or other sources of ignition. Remove all sources of ignition.  
Keep away from heat. Ignition hazard.

#### **10.5. Incompatible materials**

Keep away from combustible material.

#### **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 inhalation toxicity. Acute oral toxicity.

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CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
10099-74-8	Lead(II) nitrate				
	oral	ATE	500 mg/kg		
	inhalative vapour	ATE	11 mg/l		
	inhalative aerosol	ATE	1,5 mg/l		

#### Irritation and corrosivity

Causes eye irritation. Risk of serious damage to eyes. Harmful if inhaled. Harmful if swallowed. Harmful in contact with skin. Frequently or prolonged contact with skin may cause dermal irritation. Risk of serious damage to eyes.

#### 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 impair fertility. May damage the unborn child.

#### Specific effects in experiment on an animal

No data available

#### Additional information on tests

This mixture is classified as hazardous according to 1999/45/EC. Special hazards arising from the substance or mixture!

#### 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. Do not allow to enter into soil/subsoil.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Advice on disposal

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

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#### 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

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

**14.1. UN number:** UN1469  
**14.2. UN proper shipping name:** LEAD NITRATE  
**14.3. Transport hazard class(es):** 5.1  
**14.4. Packing group:** II  
 Hazard label: 5.1+6.1  
 Classification code: OT2  
 Limited quantity: 1 kg  
 Transport category: 2  
 Hazard No: 50  
 Tunnel restriction code: E

#### Other applicable information (land transport)

E2

#### Inland waterways transport (ADN)

**14.1. UN number:** UN1469  
**14.2. UN proper shipping name:** LEAD NITRATE  
**14.3. Transport hazard class(es):** 5.1  
**14.4. Packing group:** II  
 Hazard label: 5.1+6.1  
 Classification code: OT2  
 Special Provisions: 802  
 Limited quantity: 1 kg

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

E2

#### Marine transport (IMDG)

**14.1. UN number:** UN1469  
**14.2. UN proper shipping name:** LEAD NITRATE

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<b>14.3. Transport hazard class(es):</b>	5.1
<b>14.4. Packing group:</b>	II
Hazard label:	5.1+6.1
Marine pollutant:	P
Special Provisions:	-
Limited quantity:	1 kg
EmS:	F-A, S-Q

**Other applicable information (marine transport)**

E2

**Air transport (ICAO)**

<b>14.1. UN number:</b>	UN1469
<b>14.2. UN proper shipping name:</b>	LEAD NITRATE
<b>14.3. Transport hazard class(es):</b>	5.1
<b>14.4. Packing group:</b>	II
Hazard label:	5.1+6.1
Limited quantity Passenger:	1 kg
IATA-packing instructions - Passenger:	558
IATA-max. quantity - Passenger:	5 kg
IATA-packing instructions - Cargo:	562
IATA-max. quantity - Cargo:	25 kg

**Other applicable information (air transport)**

E2

: Y543

**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)**

08	Contact with combustible material may cause fire.
20/22	Harmful by inhalation and if swallowed.
33	Danger of cumulative effects.
41	Risk of serious damage to eyes.
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)**

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H302+H332	Harmful if swallowed or if inhaled.



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H318	Causes serious eye damage.
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.