



**Qualikems**

# Qualikems Lifesciences Pvt. Ltd.

(Formerly known as Qualikems fine chem Pvt Ltd)

Works : Plot No. 68-69,G.I.D.C Industrial Estate,Nandesari,Vadodara-391340 (Gujarat)

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

### Product identifiers

Product name : **Lead Nitrate**

CAS-No. : **10099-74-8**

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

### Details of the supplier of the safety data sheet

Company : Qualikems Lifesciences Pvt Ltd

Works : Plot No. 68.69,G.I.D.C  
Industrial Estate, Nandesari,  
Vadodara-391340 (Gujarat)

### Emergency telephone number

Emergency Phone # : +91-265-2841531 (9:00am - 6:30 pm) [Office hours]

## SECTION 2: Hazards identification

### Classification of the substance or mixture

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

Oxidizing solids (Category 2), H272

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (Category 4), H332

Serious eye damage (Category 1), H318

Reproductive toxicity (Category 1A), H360Df

Specific target organ toxicity - repeated exposure (Category 2), H373

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### Label elements

#### Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word	Danger
Hazard statement(s)	
H272	May intensify fire; oxidizer.
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 statement(s)	
P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220	Keep/Store away from clothing/ combustible materials.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
Supplemental Hazard Statements	none

Restricted to professional users.

#### Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Formula	:	N <sub>2</sub> O <sub>6</sub> Pb
Molecular weight	:	331,21 g/mol
CAS-No.	:	10099-74-8
EC-No.	:	233-245-9
Index-No.	:	082-001-00-6

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
<b>Lead nitrate</b>	Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)	
CAS-No.	10099-74-8	Ox. Sol. 2; Acute Tox. 4; Eye Dam. 1; Repr. 1A; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H272, H302, H332, H318, H360Df, H373, H400, H410 Concentration limits: >= 2,5 %: Repr. 2, H361f; >= 0,5 %: STOT RE 2, H373; M-Factor - Aquatic Acute: 10
EC-No.	233-245-9	
Index-No.	082-001-00-6	
		<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

## **SECTION 4: First aid measures**

### **Description of first aid measures**

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

#### **In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### **If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### **Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

## **SECTION 5: Firefighting measures**

### **Extinguishing media Suitable**

#### **extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **Special hazards arising from the substance or mixture**

Nitrogen oxides (NOx), Lead oxides

### **Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

### **Further information**

Use water spray to cool unopened containers.

## **SECTION 6: Accidental release measures**

### **Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### **Methods and materials for containment and cleaning up**

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

### **Reference to other sections**

For disposal see section 13.

## **SECTION 7: Handling and storage**

### **Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.  
For precautions see section 2.2.

#### **Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.  
Storage class (TRGS 510): Oxidizing hazardous materials

#### **Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

### **SECTION 8: Exposure controls/personal protection**

#### **Control parameters**

##### **Components with workplace control parameters**

#### **Exposure controls**

##### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

##### **Personal protective equipment**

###### **Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

###### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

###### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

###### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

###### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### **SECTION 9: Physical and chemical properties**

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

- |  |                                    |
|--|------------------------------------|
| a) Appearance                              | Form: solid<br>Colour: white       |
| b) Odour                                   | No data available                  |
| c) Odour Threshold                         | No data available                  |
| d) pH                                      | No data available                  |
| e) Melting point/freezing point            | Melting point/range: 470 °C - dec. |
| f) Initial boiling point and boiling range | No data available                  |
| g) Flash point                             | No data available                  |

h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapour pressure	No data available
l)	Vapour density	No data available
m)	Relative density	4,53 g/cm <sup>3</sup>
n)	Water solubility	500 g/l
o)	Partition coefficient: n-octanol/water	No data available
p)	Auto-ignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	The substance or mixture is classified as oxidizing with the category 2.

#### Other safety information

Solubility in other solvents	Ethanol 0,4 g/l Methanol 13,3 g/l
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#### SECTION 10: Stability and reactivity

##### Reactivity

No data available

##### Chemical stability

Stable under recommended storage conditions.

##### Possibility of hazardous reactions

No data available

##### Conditions to avoid

No data available

##### Incompatible materials

Strong reducing agents, Organic materials, Powdered metals

##### Hazardous decomposition products

Other decomposition products - No data available  
In the event of fire: see section 5

#### SECTION 11: Toxicological information

##### 11.1 Information on toxicological effects

###### Acute toxicity

No data available

Inhalation: No data available

LD50 Intravenous - Rat - 93 mg/kg

LD50 Intraperitoneal - Mouse - 74 mg/kg

###### Skin corrosion/irritation

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

IARC: 2A - Group 2A: Probably carcinogenic to humans (Lead nitrate)

2A - Group 2A: Probably carcinogenic to humans (Lead nitrate)

**Reproductive toxicity**

Known human reproductive toxicant

Developmental Toxicity - Rat

Specific Developmental Abnormalities: Central nervous system.

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard**

No data available

**Additional Information**

RTECS: OG2100000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated., Lead salts have been reported to cross the placenta and to induce embryo - and fetto- mortality.

**SECTION 12: Ecological information****Toxicity**

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 1,5 mg/l - 96,0 h

LC50 - Cyprinus carpio (Carp) - 0,4 - 1,3 mg/l - 96,0 h

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 0,5 - 2,0 mg/l - 48 h

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**Other adverse effects**

Very toxic to aquatic life with long lasting effects.

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

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

**Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14: Transport information****UN number**

ADR/RID: 1469

IMDG: 1469

IATA: 1469

**UN proper shipping name**

ADR/RID: LEAD NITRATE

IMDG: LEAD NITRATE

IATA: Lead nitrate

**Transport hazard class(es)**

ADR/RID: 5.1 (6.1)

IMDG: 5.1 (6.1)

IATA: 5.1 (6.1)

**Packaging group**

ADR/RID: II

IMDG: II

IATA: II

**Environmental hazards**

ADR/RID: yes

IMDG Marine pollutant: yes

IATA: no

**Special precautions for user**

No data available

**SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

**Safety, health and environmental regulations/legislation specific for the substance or mixture****Authorisations and/or restrictions on use**

Lead nitrate

CAS-No.: 10099-74-8

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

Toxic for reproduction (article 57c)

Lead nitrate

CAS-No.: 10099-74-8

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

Toxic to reproduction: category 1A

Restricted to professional users.

See Annex XVII to Regulation (EC) no 1907/2006 for Conditions of restriction

Lead nitrate

CAS-No.: 10099-74-8

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

Shall not be placed on the market or used in any individual part of jewellery articles if the concentration of lead (expressed as metal) in such a part is equal to or greater than 0,05 % by weight

See Commission Regulation (EU) No 836/2012 for Conditions of restriction

**Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

**SECTION 16: Other information****Full text of H-Statements referred to under sections 2 and 3.**

H272	May intensify fire; oxidizer.
H302	Harmful if swallowed.
H302 + H332	Harmful if swallowed or if inhaled
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H360Df	May damage the unborn child. Suspected of damaging fertility.
H361f	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.

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Qualikems Lifesciences Pvt. Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.qualikems.com](http://www.qualikems.com) for additional terms and conditions of sale.