# MATERIAL SAFETY DATA SHEET

# Lead(II) Nitrate

Appearance



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

White crystalline with lumps(solid)

1.1 Product identifiers	N <sub>2</sub> O <sub>6</sub> Pb
Product name CAS number	Lead(II) nitrate 10099-74-8
Molecular formula	N <sub>2</sub> O <sub>6</sub> Pb
Chemical structure	0 0 0 N <sup>+</sup> 0 0 Pb <sup>2+</sup>
Molecular weight	331.21

1.2 Details of the supplier of the material safety data sheet

Company	SHAANXI DAYU CHEMICAL CO., LTD.
Address	Building NO.8, XiShi Jiajun, , XiShi 2nd Road, Lianhu District, Xi'an, Shaanxi, China
Telephone	0086-29-88643345
Email	info@dayuchemical.com
Website	www.hidayuchemical.com

# **SECTION 2: Composition/information on ingredients**

Product name	Lead(II) nitrate
CAS number	10099-74-8
Purity	≧ 99%

# **SECTION 3: Hazards identification**

Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] Oxidizing solids (Category 2) Acute toxicity, Oral (Category 4) Acute toxicity, Inhalation (Category 4) Serious eye damage (Category 1) Reproductive toxicity (Category 1A) Specific target organ toxicity - repeated exposure (Category 2) Acute aquatic toxicity (Category 1) Chronic aquatic toxicity (Category 1) Chronic aquatic toxicity (Category 1) Classification according to EU Directives 67/548/EEC or 1999/45/EC Contact with combustible material may cause fire. May cause harm to the unborn child. Possible risk of impaired fertility. 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.

Signal word Danger

Hazard statement(s) May intensify fire; oxidiser. Harmful if swallowed or if inhaled Causes serious eye damage May damage the unborn child. Suspected of damaging fertility. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

Also harmful by inhalation and if swallowed. Contact with combustible material may cause fire.

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.

Possible risk of impaired fertility.

S-phrase(s)

Avoid exposure - obtain special instructions before use.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately

This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/ Safety data sheets.

#### **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 Flush eyes with water as a precaution.

#### 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 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 embryoand feto- mortality.

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 vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

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.

## **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.

Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Specific end use(s) no data available

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

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 Safety glasses with side-shields conforming to EN166 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### **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).

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

Information on basic physical and chemical properties Appearance Form: White crystalline with lumps(solid) Odour no data available Odour Threshold no data available pH no data available

Melting point/freezing point Melting point/range: 470 °C - Dec. Initial boiling point and boiling range no data available Flash point no data available Evaporation rate no data available Flammability (solid, gas) no data available Upper/lower flammability or explosive limits no data available Vapour pressure no data available Vapour density no data available Relative density 4,53 g/cm3 Water solubility 500 g/l Partition coefficient: noctanol/water no data available Auto-ignition temperature no data available Viscosity no data available Explosive properties no data available 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/IMethanol 13,3 g/I

# **SECTION 10: Stability and reactivity**

Reactivity no data available

Chemical stability no data available

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

#### **SECTION 11: Toxicological information**

Information on toxicological effects

Acute toxicity 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 sensitization no data available Germ cell mutagenicity no data available

Carcinogenicity

IARC:

2B - Group 2B: Possibly carcinogenic to humansRe-evaluation of inorganic lead compounds, IARC Monograph (Vol. 87) (February 2004) (Lead nitrate)

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

2B - Group 2B: Possibly carcinogenic to humansRe-evaluation of inorganic lead compounds, IARC

Monograph (Vol. 87) (February 2004) (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.

# **SECTION 12: Ecological information**

Persistence and degradability no data available Bioaccumulative potential no data available Mobility in soil no data available Results of PBT and vPvB assessment no data available 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**

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. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture no data available

Chemical Safety Assessment no data available

# **SECTION 16: Other 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. SHAANXI DAYU CHEMICAL CO., LTD. shall not be held liable for any damage resulting from handling or from contact with the above product. Please see additional terms and conditions for reference.