

Section 1. Identification**1.1 Product Identifier** 1198

Product Name	LEAD NITRATE
CAS Number	10099-74-8
REACH Registration No	A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.
Molecular Formula	$Pb(NO_3)_2 = 331.21$

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

Uses of Material	Chemical for industrial and laboratory use. Not suitable for domestic use.
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1.3 Supplier Vickers Laboratories Ltd

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(Have this document to hand)**Section 2. Hazards Identification****2.1 Classification of the substance or mixture****Classification according to regulation 1272/2008/EC**

Acute toxicity, category 4 (oral)	H302: Harmful if swallowed.
Acute toxicity, category 4 (inhalation)	H332: Harmful if inhaled.
Serious eye damage/irritation, category 1	H318: Causes serious eye damage.
Skin sensitization, category 1	H317: May cause an allergic skin reaction.
Carcinogenicity, category 2	H351: Suspected of causing cancer.
Reproductive toxicity, category 1A	H360: May damage fertility or the unborn child.
Spec target organ tox - repeat, category 1	H372: Causes damage to organs through prolonged or repeated exposure.
Hazard to aquatic environment, category 1	H400: Very toxic to aquatic life.
Hazard to aquatic environment, category 1	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements**Labelling according to regulation 1272/2008/EC**

Signal word	Danger
Hazard Pictograms	



Hazard Statements Harmful if swallowed. Harmful if inhaled. Causes serious eye damage. May cause an allergic skin reaction. May damage fertility or the unborn child. Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

Precautionary Statements Use personal protective equipment as required. Do not breathe dust. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. **IF SWALLOWED:** Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Lead Nitrate	10099-74-8	233-245-9		99%	Acute Tox. 4 (O), Acute Tox. 4 (I), Eye Dam. 1, Skin Sens. 1, Carc. 2, Repr. 1A, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water.
Inhalation	Remove from exposure. If material has reacted with an acid to form, nitrous fumes, Obtain immediate medical attention even if patient is not complaining of discomfort.
Ingestion	If conscious give plenty of water to drink. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

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

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Water spray.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards May evolve toxic fumes if involved in a fire. Mixtures with combustible materials are flammable. Mixtures with finely divided combustible materials can react explosively.

5.3 Advice for firefighters

Advice for firefighters Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Evacuate area immediately. If contact with acid is possible, use full protective clothing and breathing apparatus. Only re-enter area with full protective clothing and breathing apparatus.

6.2 Environmental precautions

Environmental Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage Shovel/sweep up into container for removal Wash area down with copious amounts of water.
Minor Spillage Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.
Ensure Local Exhaust Ventilation maintains dust concentrations to a minimum.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Store in a suitable area for oxidising agents. Keep well separated from combustible materials.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits	
			Long Term (8hr TWA)	Short Term 15min period)
Lead Nitrate	10099-74-8	99%	-	-

Exposure data source(s) No occupational exposure data currently available.

8.2 Exposure controls

Respiratory Protection If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.
Hand Protection Wear gloves.
Eye Protection Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance White translucent crystals.
Odour No specific odour.
pH 4.3 @ 20°C
Boiling Point Not available
Melting Point 458 °C
Flash Point Not applicable
Upper Flammable Limit Not applicable
Lower Flammable Limit Not applicable
Auto Ignition Not applicable

Explosive Properties	No.
Oxidising Properties	Yes.
Vapour Pressure	Not applicable
Relative Density	4.490
Water Solubility	486 g/L @ 20 °C

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1 Reactivity	No data available.
10.2 Chemical Stability	Stable under normal conditions
10.3 Possibility of hazardous reactions	No data available.
10.4 Conditions to Avoid	Avoid contact with acids or combustible materials.
10.5 Incompatible Materials	Acids : reacts to form poisonous nitrous fumes. Combustible materials.
10.6 Hazardous Decomposition Products	Not flammable but will assist a fire, producing irritant and toxic fumes of oxides of nitrogen.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Causes serious eye damage.
Skin	Unlikely to be an irritant on brief or occasional exposure. May cause sensitisation by skin contact.
LD50 Skin	>2000 mg/Kg Rat
Ingestion	Moderately toxic by ingestion.
LD50 Oral	>2000 mg/Kg Rat
Inhalation	Inhalation of the dust may cause ultra structural changes to the lungs and effect the central nervous system.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Suspected of causing cancer. Route of exposure: Oral
Mutagenicity	Significant increases in chromosome aberrations have been reported.
Reproductive Effects	May damage fertility or the unborn child. Route of exposure: Dermal
Other Information	Chronic lead poisoning may occur from dust inhalation. Anaemia and other blood effects are the most common. Early symptoms of poisoning include fatigue, headache, sleep disturbances, aching bones and muscles, gastrointestinal disturbances and reduced appetite. Large doses affect the central nervous system causing severe headaches, convulsions, coma, kidney damage and death.

Section 12. Ecological

12.1 Toxicity	Lead salts are harmful to the environment.
LC50 Algal	21.7 µg/L Green algae (48 hours)
LC50 Crustacea	107 µg/L Daphnia magna (48 hours)
LC50 Fish	40.8 µg/L Fathead Minnow (96 hours)
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 & vPvB assessment	Assessment not required.
12.6 Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of to a licensed land fill site.
Contaminated Packaging	Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number	1469
14.2 Proper Shipping Name	Lead nitrate
14.3 Transport classes	
UN classification	5.1
Subsidiary hazard(s)	6.1
Transport category	2
ADR Hazard ID	56
Tunnel Restriction Code	E
14.4 Packing Group	II
14.5 Environment hazards	Marine pollutant.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Acute toxicity, category 4 (oral); Acute toxicity, category 4 (inhalation); Serious eye damage/irritation, category 1; Skin sensitization, category 1; Carcinogenicity, category 2; Reproductive toxicity, category 1A; Spec target organ tox - repeat, category 1; Hazard to aquatic environment, category 1; Hazard to aquatic environment, category 1

Signal word Danger

Hazard Pictograms



Hazard Statements H302, H332, H318, H317, H360, H351, H372, H410
Harmful if swallowed. Harmful if inhaled. Causes serious eye damage. May cause an allergic skin reaction. May damage fertility or the unborn child. Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

Precautionary Statements P281, P260, P264, P270, P301+P312, P330
Use personal protective equipment as required. Do not breathe dust. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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