according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.19.2014

Lead Nitrate 1M

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Lead Nitrate 1M **Manufacturer/Supplier Article number**: LN4291SS

Recommended uses of the product and restrictions on use: Laboratory

Manufacturer Details:

AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 1-717-632-1291

Emergency telephone number:

ChemTel: (24-hour)

+1(800)255-3924

+1(813)248-0585 (International)

SECTION 2: Hazards identification

Classification of the substance or mixture:









Environmentally Damaging

Eye Damage 1. Repr Tox. 1A. Aquatic AcTox. 1. Aquatic ChrTox. 1. OxLiq 2.

Signal word: Danger

Hazard statements:

May intensify fire; oxidizer.

Causes serious eye damage.

May cause damage to organs through prolonged or repeated exposure.

May damage fertility or the unborn child.

Very toxic to aquatic life with long lasting effects.

Very toxic to aquatic life.

Precautionary statements:

If medical advice is needed have product container or label at hand.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.19.2014

Lead Nitrate 1M

Keep out of reach of children.

Read label before use.

Do not eat, drink or smoke when using this product.

Avoid release to the environment.

Take any precaution to avoid mixing with combustibles.

Wash skin thoroughly after handling.

Keep/Store away from clothing, combustible materials.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Do not breathe dust/fume/gas/mist/vapors/spray.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Collect spillage.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing.

Rinse mouth.

Store locked up.

Dispose of contents/container.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

<u>g. carentar</u>				
Ingredients:				
CAS 10099-74-8	Lead Nitrate	33 %		
CAS 7732-18-5	Deionized Water	67 %		
_		Percentages are by weight		

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing as necessary and position individual in a comfortable position. Consult a physician.

After skin contact:

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

After eye contact:

Rinse or flush exposed eye gently using water for 15-20 minutes. Protect unexposed eye. If able remove contact lenses while rinsing. Consult a physician.

After swallowing:

Rinse mouth with water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Consult a physician.

Most important symptoms and effects, both acute and delayed:

Irritation, Nausea, Headache, Shortness of breath.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.19.2014

Lead Nitrate 1M

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Nitrogen oxides. Lead oxides. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment:

Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Wear protective eyewear, gloves, and clothing.

Additional information (precautions):

Avoid contact with skin, eyes and clothing. Avoid generating dust. Ensure adequate ventilation.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep product and empty container away from heat and sources of ignition. Use spark-proof tools and explosion-proof equipment. Ensure adequate ventilation.

Environmental precautions:

Prevent from reaching drains, sewer, or waterway. Dust deposits should not be allowed to accumulate on surfaces. Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment. Do not release into the environment. Collect contaminated soil for characterization per Section 13.

Methods and material for containment and cleaning up:

Sweep up and containerize for disposal. Avoid generating dust. Always obey local regulations. Contain spillage and then collect with an electrically protected vacuum cleaner or by wet-brushing. Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. If necessary use trained response staff or contractor.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Avoid contact with skin, eyes and clothing. Use only in well ventilated areas. Wash hands after handling. Follow Chemical Hygiene Plan. Wash hands before breaks and immediately after handling the product. Do not inhale gases, fumes, dust, mist, vapor, and aerosols. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Do not eat, drink, smoke, or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Store with like hazards. Store away from food. Keep product and empty container away from heat and sources of ignition. Keep container tightly closed in a cool, dry, well-ventilated area.

SECTION 8: Exposure controls/personal protection

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.19.2014

Lead Nitrate 1M







Control parameters: 10099-74-8, Lead nitrate., 0.05 mg/m3 US ACGIH Threshold Limit Values

(TLV).

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Use under a fume hood. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Normal ventilation is adequate. Where risk assessment shows air-**Respiratory protection:**

> 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.

Protection of skin: Wear protective clothing. Select glove material impermeable and

> resistant to the substance. Select glove material based on rates of diffusion and degradation. Wash off with soap and plenty of water. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Complete suit protecting against chemicals. Select protective clothing according to the concentration and amount of the dangerous substance at the specific workplace. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and

the degradation.

Eye protection: Wear equipment for eye protection tested and approved under

appropriate government standards such as NIOSH (US) or EN 166(EU).

Safety glasses with side shields or goggles.

General hygienic measures: Immediately remove all soiled and contaminated clothing. Wash hands

> before breaks and at the end of work. Avoid contact with the eyes and skin. Do not inhale gases, fumes, dust, mist, vapor, and aerosols. Before re-wearing, wash contaminated clothing. Wash hands and exposed skin

with soap and plenty of water.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear, colorless liquid		No information No information
Odor:	Odorless	Vapor pressure at 20°C:	14 mm Hg @ 16C
Odor threshold:	Not applicable	Vapor density:	0.7(of water)
pH-value:	3 - 4 (20% aqueous sol.)	Relative density:	1.00g/mL @ 20C
Melting/Freezing point:	Approx. 0°C	Solubilities:	Material is water soluble.
Boiling point/Boiling range:	Approx. 100C	Partition coefficient (noctanol/water):	Not applicable

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.19.2014

Lead Nitrate 1M					
Flash point (closed cup):	INOT ANNIICANIE	Auto/Self-ignition temperature:	Not applicable		
Evaporation rate:	Not applicable	Decomposition temperature:	470°C		
Flammability (solid, gaseous):	No information		a. Kinematic: Not applicable b. Dynamic: Not applicable		
Density at 20°C:	No information				

SECTION 10: Stability and reactivity

Reactivity: None Chemical stability:

Oxidizer. Contact with combustible or organic material may cause fire.

Possible hazardous reactions:

Stable under normal conditions.

Conditions to avoid:

Dust generation. Excessive heat. Incompatible materials.

Incompatible materials:

Strong reducing agents. Organic materials. Powdered metals.

Hazardous decomposition products:

Carbon oxides (CO, CO2). Nitrogen oxides (NO, NO2). Lead oxides. Lead fumes.

SECTION 11: Toxicological information

Acute Toxicity: None

Chronic Toxicity: No additional information.

Skin corrosion/irritation: No additional information.

Serious eye damage/irritation: No additional information.

Respiratory or skin sensitization: No additional information.

Carcinogenicity:

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

Germ cell mutagenicity:

Mutagenic effects have occurred in humans.

Reproductive Toxicity:

Toxicity effects have occurred in lab animals.

STOT-single and repeated exposure: No additional information.

Additional toxicological information:

No additional information.

SECTION 12: Ecological information

Ecotoxicity:

Aquatic Tox., LC50 - Oncorhynchus mykiss (rainbow trout) - 1.5 mg/l - 96.0 h.

Aquatic Tox., LC50 - Cyprinus carpio (Carp) - 0.4 - 1.3 mg/l - 96.0 h.

Aquatic Tox., EC50 - Daphnia magna (Water flea) - 0.5 - 2.0 mg/l - 48 h.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.19.2014

Lead Nitrate 1M

Persistence and degradability: No additional information. **Bioaccumulative potential**: No additional information.

Mobility in soil: No additional information.

Other adverse effects:

Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

Waste disposal recommendations:

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. Contact a licensed professional waste disposal service to dispose of this material. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

SECTION 14: Transport information

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA 3139

Limited Quantity Exception: None

Bulk: Non Bulk:

RQ (if applicable): None RQ (if applicable): None

Proper shipping Name: Oxidizing liquid.

Proper shipping Name: Oxidizing liquid.

Hazard Class: 5

Hazard Class: 5

Hazard Class: 5
Packing Group: ||.

Hazard Class: 5
Packing Group: ||.

Marine Pollutant (if applicable): No Marine Pollutant (if applicable): No

additional information. additional information.

Comments: None Comments: None





SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute, Chronic, Reactive

SARA Section 313 (Specific toxic chemical listings):

10099-74-8 Lead nitrate.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.19.2014

Lead Nitrate 1M

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

10099-74-8 Lead Nitrate 10 lbs.

Proposition 65 (California):

Chemicals known to cause cancer:

10099-74-8 Lead Nitrate.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 2-0-1 **HMIS**: 2-0-1

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.

PNEC. Predicted No-Effect Concentration (REACH).

CFR Code of Federal Regulations (USA)

SARA Superfund Amendments and Reauthorization Act (USA).

RCRA. Resource Conservation and Recovery Act (USA).

TSCA. Toxic Substances Control Act (USA).

NPRI National Pollutant Release Inventory (Canada).

DOT US Department of Transportation.

IATA International Air Transport Association.

GHS Globally Harmonized System of Classification and Labelling of Chemicals.

ACGIH American Conference of Governmental Industrial Hygienists

CAS Chemical Abstracts Service (division of the American Chemical Society).

NFPA National Fire Protection Association (USA).

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.19.2014

Lead Nitrate 1M

HMIS Hazardous Materials Identification System (USA).

WHMIS Workplace Hazardous Materials Information System (Canada).

DNEL Derived No-Effect Level (REACH).