



# Material Safety Data Sheet

<b>NFPA</b> 	<b>HMS</b> <table border="1"> <tr><td>Health Hazard</td><td style="text-align: center;">3</td></tr> <tr><td>Env. Hazard</td><td style="text-align: center;">0</td></tr> <tr><td>Reactivity</td><td style="text-align: center;">0</td></tr> </table>	Health Hazard	3	Env. Hazard	0	Reactivity	0	<b>Personal Protective Equipment</b>  See Section 15.
Health Hazard	3							
Env. Hazard	0							
Reactivity	0							

<b>Section 1. Chemical Product and Company Identification</b>		Page Number: 1
Common Name/ Trade Name	<b>Lead nitrate</b>	
Manufacturer	ProChem, Inc. 826 Roosevelt Rd Rockford, IL 61109	CAS# 10099-74-8 RTECS OG2100000 TSCA TSCA 8(b) inventory: Lead nitrate CI# Not available.
Commercial Name(s)	Not available.	<b>IN CASE OF EMERGENCY</b> <b>CHEMTREC (24hr) 800-424-9300</b> <b>CALL 815-398-1788</b>
Synonym	Not available.	
Chemical Name	Not available.	
Chemical Family	Not available.	
Chemical Formula	Pb(NO <sub>3</sub> ) <sub>2</sub>	
Supplier		

<b>Section 2. Composition and Information on Ingredients</b>					
Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	
1) Lead nitrate	10099-74-8	0.15		0.45	100
Toxicological Data on Ingredients		<b>Lead nitrate</b> LD50: Not available. LC50: Not available.			

<b>Section 3. Hazards Identification</b>	
Potential Acute Health Effects	Extremely hazardous in case of ingestion. Very hazardous in case of skin contact (corrosive, irritant), of eye contact (irritant), of inhalation. Hazardous in case of skin contact (permeator). The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Prolonged exposure may result in skin burns and ulcerations. Over-exposure by inhalation may cause respiratory irritation. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

<b>Potential Chronic Health Effects</b>	<p>Extremely hazardous in case of ingestion.          Very hazardous in case of skin contact (corrosive, irritant), of eye contact (irritant), of inhalation.          Hazardous in case of skin contact (permeator).  <b>CARCINOGENIC EFFECTS:</b> Classified 2B (Possible for human.) by IARC.  <b>MUTAGENIC EFFECTS:</b> Not available.  <b>TERATOGENIC EFFECTS:</b> Not available.  <b>DEVELOPMENTAL TOXICITY:</b> Not available.          The substance is toxic to blood, kidneys, lungs, the nervous system, mucous membranes.          Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage. Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.</p>
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#### Section 4. First Aid Measures

<b>Eye Contact</b>	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.
<b>Skin Contact</b>	If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical got on the victim's exposed skin, such as the hands : Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.
<b>Serious Skin Contact</b>	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
<b>Inhalation</b>	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
<b>Serious Inhalation</b>	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. <b>WARNING:</b> It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.
<b>Ingestion</b>	Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
<b>Serious Ingestion</b>	Not available.

#### Section 5. Fire and Explosion Data

<b>Flammability of the Product</b>	Non-flammable.
<b>Auto-Ignition Temperature</b>	Not applicable.
<b>Flash Points</b>	Not applicable.
<b>Flammable Limits</b>	Not applicable.
<b>Products of Combustion</b>	Not available.
<b>Fire Hazards in Presence of Various Substances</b>	Not applicable.
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
<b>Fire Fighting Media and Instructions</b>	Not applicable.
<b>Special Remarks on Fire Hazards</b>	Not available.

Special Remarks on Explosion Hazards Not available.

### Section 6. Accidental Release Measures

Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Large Spill	Oxidizing material. Corrosive solid. Stop leak if without risk. Do not get water inside container. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

### Section 7. Handling and Storage

Precautions	Keep locked up. Keep container dry. Keep away from heat. Keep away from sources of ignition. Keep away from combustible material. Do not ingest. Do not breathe dust. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.
Storage	Corrosive materials should be stored in a separate safety storage cabinet or room.

### Section 8. Exposure Controls/Personal Protection

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	Splash goggles. Lab coat. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Vapor and dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits	TWA: 0.15 CEIL: 0.45 (mg/m <sup>3</sup> )  Consult local authorities for acceptable exposure limits.

### Section 9. Physical and Chemical Properties

Physical state and appearance	Solid.	Odor	Not available.
Molecular Weight	331.2 g/mole	Taste	Not available.
pH (1% soln/water)	5 [Acidic.]	Color	Not available.
Boiling Point	Not available.		
Melting Point	Decomposes.		
Critical Temperature	Not available.		
Specific Gravity	4.53 (Water = 1)		
Vapor Pressure	Not applicable.		
Vapor Density	Not available.		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		

**Lead nitrate**

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Dispersion Properties	See solubility in water.
Solubility	Easily soluble in cold water.

**Section 10. Stability and Reactivity Data**

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Not available.
Incompatibility with various substances	Not available.
Corrosivity	Non-corrosive in presence of glass.
Special Remarks on Reactivity	Not available.
Special Remarks on Corrosivity	Not available.
Polymerization	No.

**Section 11. Toxicological Information**

Routes of Entry	Dermal contact. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	LD50: Not available. LC50: Not available.
Chronic Effects on Humans	<b>CARCINOGENIC EFFECTS:</b> Classified 2B (Possible for human.) by IARC. The substance is toxic to blood, kidneys, lungs, the nervous system, mucous membranes.
Other Toxic Effects on Humans	Extremely hazardous in case of ingestion. Very hazardous in case of skin contact (corrosive, irritant), of inhalation. Hazardous in case of skin contact (permeator).
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Animal: passes through placental barrier, excreted in maternal milk.
Special Remarks on other Toxic Effects on Humans	Not available.

**Section 12. Ecological Information**

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are as toxic as the original product.
Special Remarks on the Products of Biodegradation	Not available.

**Section 13. Disposal Considerations**

Waste Disposal

**Section 14. Transport Information**

DOT Classification CLASS 5.1: Oxidizing material.

Identification : Lead nitrate : UN1469 PG: II

Special Provisions for Transport Marine Pollutant

DOT (Pictograms)



**Section 15. Other Regulatory Information and Pictograms**

**Federal and State Regulations**  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Lead nitrate  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (female) which would require a warning under the statute: Lead nitrate  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (male) which would require a warning under the statute: Lead nitrate  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Lead nitrate  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Lead nitrate  
 Pennsylvania RTK: Lead nitrate  
 Massachusetts RTK: Lead nitrate  
 TSCA 8(b) inventory: Lead nitrate  
 SARA 313 toxic chemical notification and release reporting: Lead nitrate  
 CERCLA: Hazardous substances.: Lead nitrate

**California Proposition 65 Warnings**  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Lead nitrate  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Lead nitrate

**Other Regulations** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

<b>Other Classifications</b>	<b>WHMIS (Canada)</b>	CLASS C: Oxidizing material. CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).
	<b>DSCL (EEC)</b>	R34- Causes burns. R40- Possible risks of irreversible effects.

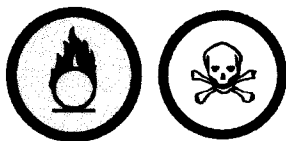
**HMIS (U.S.A.)**

	3
	0
Reactivity	0
Personal Protection	i

**National Fire Protection Association (U.S.A.)**

Health		Flammability
		Reactivity
		Specific hazard

WHMIS (Canada)  
(Pictograms)



DSCL (Europe)  
(Pictograms)



TDG (Canada)  
(Pictograms)



ADR (Europe)  
(Pictograms)



**Protective Equipment**



Gloves.



Lab coat.



Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.



Splash goggles.

**Section 16. Other Information**

References Not available.

Other Special Considerations Not available.

PREPARATION DATE: NOV 2005

Notice to Reader

*All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, ProChem Chemicals Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.*