# **Chem-Impex International Inc.**

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# SAFETY DATA SHEET

### SECTION 1. CHEMICAL IDENTIFICATION

| CATALOG #:                      | 35627                                               |
|---------------------------------|-----------------------------------------------------|
| NAME:                           | Lead(II) nitrate                                    |
| SYNONYMS:                       | Lead dinitrate                                      |
| 24 HOUR EMERGENCY<br>TELEPHONE: | (800) 535-5053(USA)<br>352-323-3500 (INTERNATIONAL) |
| TO REQUEST AN MSDS:             | (800) 869-9290                                      |
| CUSTOMER<br>SERVICE:            | (630) 766-2112                                      |

## SECTION 2. HAZARDS IDENTIFICATION

#### CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS) OXIDIZING SOLIDS (CATEGORY 2), H272 ACUTE TOXICITY, ORAL (CATEGORY 4), H302 ACUTE TOXICITY, INHALATION (CATEGORY 4), H332 SERIOUS EYE DAMAGE (CATEGORY 1), H318 CARCINOGENICITY (CATEGORY 1B), H350 REPRODUCTIVE TOXICITY (CATEGORY 1A), H360 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE (CATEGORY 1), BLOOD, CENTRAL NERVOUS SYSTEM, IMMUNE SYSTEM, KIDNEY, H372 SHORT-TERM (ACUTE) AQUATIC HAZARD (CATEGORY 1), H400 LONG-TERM (CHRONIC) AQUATIC HAZARD (CATEGORY 1), H410

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM



SIGNAL WORD DAN

#### HAZARD STATEMENT(S)

| MAY INTENSIFY FIRE; OXIDISER.                  |
|------------------------------------------------|
| HARMFUL IF SWALLOWED OR IF INHALED             |
| CAUSES SERIOUS EYE DAMAGE.                     |
| MAY CAUSE CANCER.                              |
| MAY DAMAGE FERTILITY OR THE UNBORN CHILD.      |
| CAUSES DAMAGE TO ORGANS (BLOOD, CENTRAL        |
| NERVOUS SYSTEM, IMMUNE SYSTEM, KIDNEY) THROUGH |
| PROLONGED OR REPEATED EXPOSURE.                |
| VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING   |
| EFFECTS.                                       |
|                                                |

#### **PRECAUTIONARY STATEMENT(S)**

| P201                 | OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.             |
|----------------------|-----------------------------------------------------|
| P202                 | DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE     |
|                      | BEEN READ AND UNDERSTOOD.                           |
| P210                 | KEEP AWAY FROM HEAT.                                |
| P220                 | KEEP/STORE AWAY FROM CLOTHING/ COMBUSTIBLE          |
|                      | MATERIALS.                                          |
| P221                 | TAKE ANY PRECAUTION TO AVOID MIXING WITH            |
|                      | COMBUSTIBLES.                                       |
| P260                 | DO NOT BREATHE DUST/ FUME/ GAS/ MIST/ VAPOURS/      |
|                      | SPRAY.                                              |
| P264                 | WASH SKIN THOROUGHLY AFTER HANDLING.                |
| P270                 | DO NOT EAT, DRINK OR SMOKE WHEN USING THIS          |
|                      | PRODUCT.                                            |
| P271                 | USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.     |
| P273                 | AVOID RELEASE TO THE ENVIRONMENT.                   |
| P280                 | WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE    |
|                      | PROTECTION/ FACE PROTECTION.                        |
| P301 + P312 + P330   | IF SWALLOWED: CALL A POISON CENTER OR DOCTOR/       |
|                      | PHYSICIAN IF YOU FEEL UNWELL. RINSE MOUTH.          |
| P304 + P340 + P312   | IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP     |
|                      | COMFORTABLE FOR BREATHING. CALL A POISON CENTER     |
|                      | OR DOCTOR/ PHYSICIAN IF YOU FEEL UNWELL.            |
| P305 + P351 + P338 + | IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL |
| P310                 | 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/<br>ATTENTION.                           |
|--------------------------|--------------------------------------------------------------------------------------|
| P370 + P378              | IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR ALCOHOL-RESISTANT FOAM TO EXTINGUISH. |
| P391                     | COLLECT SPILLAGE.                                                                    |
| P405                     | STORE LOCKED UP.                                                                     |
| P501                     | DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED                                        |
|                          | WASTE DISPOSAL PLANT.                                                                |
| HAZARDS NOT<br>OTHERWISE | NONE                                                                                 |

OTHERWISE CLASSIFIED (HNOC) OR NOT COVERED BY GHS

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| MF:     | $Pb(NO_3)_2$                       |
|---------|------------------------------------|
| MW:     | 331.21                             |
| CAS-NO. | 10099-74-8                         |
| PURITY: | $\geq$ 99.99% (Trace metals basis) |

#### HAZARDOUS COMPONENTS

| COMPONENT        | CLASSIFICATION                                                                                                                                                                                                  | CONCENTRATION |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Lead(II) nitrate |                                                                                                                                                                                                                 | -             |
|                  | OX. SOL. 2; ACUTE TOX. 4;<br>EYE DAM. 1; CARC. 1B; REPR.<br>1A; STOT RE 1; AQUATIC<br>ACUTE 1; AQUATIC CHRONIC<br>1; H272, H302, H332, H318,<br>H350, H360, H372, H400, H410<br>M-FACTOR - AQUATIC ACUTE:<br>10 | <= 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.MOVE OUT OF DANGEROUS AREA.

| IF INHALED                                                                             | IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF<br>NOT BREATHING, GIVE ARTIFICIAL RESPIRATION.<br>CONSULT A PHYSICIAN.     |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| IN CASE OF SKIN<br>CONTACT                                                             | WASH OFF WITH SOAP AND PLENTY OF WATER.<br>CONSULT A PHYSICIAN.                                                           |
| IN CASE OF EYE<br>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<br>UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER.<br>CONSULT A PHYSICIAN.                 |
| MOST IMPORTANT<br>SYMPTOMS AND<br>EFFECTS, BOTH ACUTE<br>AND DELAYED                   | THE MOST IMPORTANT KNOWN SYMPTOMS AND<br>EFFECTS ARE DESCRIBED IN THE LABELLING (SEE<br>SECTION 2.2) AND/OR IN SECTION 11 |
| INDICATION OF ANY<br>IMMEDIATE MEDICAL<br>ATTENTION AND<br>SPECIAL TREATMENT<br>NEEDED | NO DATA AVAILABLE                                                                                                         |

# SECTION 5. FIRE AND EXPLOSION DATA

#### **EXTINGUISHING MEDIA**

| SUITABLE<br>EXTINGUISHING MEDIA                             | DRY POWDER DRY SAND                                                       |
|-------------------------------------------------------------|---------------------------------------------------------------------------|
| SPECIAL HAZARDS<br>ARISING FROM THE<br>SUBSTANCE OR MIXTURE | NITROGEN OXIDES (NOX), LEAD OXIDES                                        |
| ADVICE FOR<br>FIREFIGHTERS                                  | WEAR SELF-CONTAINED BREATHING APPARATUS FOR<br>FIREFIGHTING IF NECESSARY. |

# **FURTHER INFORMATION** USE WATER SPRAY TO COOL UNOPENED CONTAINERS.

# SECTION 6. ACCIDENTAL RELEASE MEASURES

| PERSONAL     | USE PERSONAL PROTECTIVE EQUIPMENT. AVOID      |
|--------------|-----------------------------------------------|
| PRECAUTIONS, | DUST FORMATION. AVOID BREATHING VAPOURS, MIST |
| PROTECTIVE   | OR GAS. ENSURE ADEQUATE VENTILATION.          |

| EQUIPMENT AND<br>EMERGENCY<br>PROCEDURES                       | EVACUATE PERSONNEL TO SAFE AREAS. AVOID BREATHING DUST.                                                                                                                                                                                                                         |
|----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                | FOR PERSONAL PROTECTION SEE SECTION 8.                                                                                                                                                                                                                                          |
| ENVIRONMENTAL<br>PRECAUTIONS                                   | PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE<br>TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.<br>DISCHARGE INTO THE ENVIRONMENT MUST BE<br>AVOIDED.                                                                                                                                 |
| METHODS AND<br>MATERIALS FOR<br>CONTAINMENT AND<br>CLEANING UP | SWEEP UP AND SHOVEL. CONTAIN SPILLAGE, AND<br>THEN COLLECT WITH AN ELECTRICALLY PROTECTED<br>VACUUM CLEANER OR BY WET- BRUSHING AND<br>PLACE IN CONTAINER FOR DISPOSAL ACCORDING TO<br>LOCAL REGULATIONS (SEE SECTION 13). KEEP IN<br>SUITABLE, CLOSED CONTAINERS FOR DISPOSAL. |
| REFERENCE TO OTHER<br>SECTIONS                                 | FOR DISPOSAL SEE SECTION 13.                                                                                                                                                                                                                                                    |

# SECTION 7. HANDLING AND STORAGE

| PRECAUTIONS FOR SAFE<br>HANDLING                                   | AVOID CONTACT WITH SKIN AND EYES. AVOID<br>FORMATION OF DUST AND AEROSOLS.FURTHER<br>PROCESSING OF SOLID MATERIALS MAY RESULT IN<br>THE FORMATION OF COMBUSTIBLE DUSTS. THE<br>POTENTIAL FOR COMBUSTIBLE DUST FORMATION<br>SHOULD BE TAKEN INTO CONSIDERATION BEFORE<br>ADDITIONAL PROCESSING OCCURS.<br>PROVIDE APPROPRIATE EXHAUST VENTILATION AT<br>PLACES WHERE DUST IS FORMED.KEEP AWAY FROM<br>SOURCES OF IGNITION - NO SMOKING.KEEP AWAY<br>FROM HEAT AND SOURCES OF IGNITION.<br>FOR PRECAUTIONS SEE SECTION 2.2. |
|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CONDITIONS FOR SAFE<br>STORAGE, INCLUDING<br>ANY INCOMPATIBILITIES | KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND<br>WELL-VENTILATED PLACE.<br>Store at RT                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| SPECIFIC END USE(S)                                                | APART FROM THE USES MENTIONED IN SECTION 1.2<br>NO OTHER SPECIFIC USES ARE STIPULATED                                                                                                                                                                                                                                                                                                                                                                                                                                     |

# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**CONTROL PARAMETERS** 

| COMPONENT        | CAS-NO.    | VALUE                                | CONTROL                                   | BASIS                                |  |
|------------------|------------|--------------------------------------|-------------------------------------------|--------------------------------------|--|
|                  |            |                                      | PARAMETERS                                |                                      |  |
| Lead(II) nitrate | 10099-74-8 | TWA                                  | 0.05 MG/M3                                | USA. ACGIH THRESHOLD LIMIT           |  |
|                  |            |                                      |                                           | VALUES (TLV)                         |  |
|                  | REMARKS    | CENTRAL                              | NERVOUS SYSTE                             | M IMPAIRMENT                         |  |
|                  |            | HEMATOI                              | LOGIC EFFECTS                             |                                      |  |
|                  |            | PERIPHEF                             | RAL NERVOUS SYS                           | STEM IMPAIRMENT                      |  |
|                  |            | SUBSTAN                              | CES FOR WHICH 1                           | THERE IS A BIOLOGICAL                |  |
|                  |            | EXPOSUR                              | E INDEX OR INDI                           | CES (SEE BEI SECTION)                |  |
|                  |            | CONFIRM                              | ED ANIMAL CARC                            | CINOGEN WITH UNKNOWN                 |  |
|                  |            | RELEVAN                              | CE TO HUMANS                              |                                      |  |
|                  |            | VARIES                               |                                           |                                      |  |
|                  |            | PEL                                  | 0.05 MG/M3                                | OSHA SPECIFICALLY                    |  |
|                  |            |                                      |                                           | REGULATED                            |  |
|                  |            |                                      |                                           | CHEMICALS/CARCINOGENS                |  |
|                  |            | 1910.1025                            | 10.1025                                   |                                      |  |
|                  |            | IF AN EMI                            | PLOYEE IS EXPOSED TO LEAD FOR MORE THAN 8 |                                      |  |
|                  |            |                                      |                                           | Y WORK DAY, THE PERMISSIBLE EXPOSURE |  |
|                  |            |                                      | D AVERAGE (TWA) FOR THAT                  |                                      |  |
|                  |            | DAY, SHALL BE REDUCED ACCORDING TO T |                                           |                                      |  |
|                  |            |                                      | MISSIBLE LIMIT (IN G/M3                   |                                      |  |
|                  |            | /                                    | THE DAY THIS SECTION APPLIES              |                                      |  |
|                  |            |                                      |                                           | POSURE TO LEAD, EXCEPT AS            |  |
|                  |            |                                      |                                           | (A)(2). IT DOES NOT APPLY TO         |  |
|                  |            |                                      |                                           | STRY OR TO AGRICULTURAL              |  |
|                  |            |                                      |                                           | 29 CFR PART 1928.                    |  |
|                  |            |                                      | LATED CARCINOGEN                          |                                      |  |
|                  |            | TWA                                  | 0.05 MG/M3                                | USA. NIOSH RECOMMENDED               |  |
|                  |            |                                      |                                           | EXPOSURE LIMITS                      |  |
|                  |            | SEE APPENDIX C                       |                                           |                                      |  |
|                  |            | PEL                                  | 0.05                                      | CALIFORNIA PERMISSIBLE               |  |
|                  |            |                                      | MG/M3                                     | EXPOSURE LIMITS FOR                  |  |
|                  |            |                                      |                                           | CHEMICAL CONTAMINANTS                |  |
|                  |            | SEE SECT                             | ION 5198                                  |                                      |  |

# COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

#### **EXPOSURE CONTROLS**

| APPROPRIATE | HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL      |
|-------------|------------------------------------------------|
| ENGINEERING | HYGIENE AND SAFETY PRACTICE. WASH HANDS BEFORE |
| CONTROLS    | BREAKS AND AT THE END OF WORKDAY.              |

#### PERSONAL PROTECTIVE EQUIPMENT

EYE/FACEFACE SHIELD AND SAFETY GLASSES USE EQUIPMENT FORPROTECTIONEYE PROTECTION TESTED AND APPROVED UNDER<br/>APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH<br/>(US) OR EN 166(EU).

| SKIN PROTECTION                         | HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED<br>PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE<br>(WITHOUT TOUCHING GLOVE"S OUTER SURFACE) TO<br>AVOID SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF<br>CONTAMINATED GLOVES AFTER USE IN ACCORDANCE<br>WITH APPLICABLE LAWS AND GOOD LABORATORY<br>PRACTICES. WASH AND DRY HANDS.                                                                                                                         |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                         | FULL CONTACT<br>MATERIAL: NITRILE RUBBER<br>MINIMUM LAYER THICKNESS: 0.11 MM<br>BREAK THROUGH TIME: 480 MIN<br>MATERIAL TESTED:DERMATRIL (KCL 740, SIZE M)                                                                                                                                                                                                                                                                                               |
|                                         | SPLASH CONTACT<br>MATERIAL: NITRILE RUBBER<br>MINIMUM LAYER THICKNESS: 0.11 MM<br>BREAK THROUGH TIME: 480 MIN<br>MATERIAL TESTED:DERMATRIL (KCL 740, SIZE M)                                                                                                                                                                                                                                                                                             |
|                                         | IF USED IN SOLUTION, OR MIXED WITH OTHER<br>SUBSTANCES, AND UNDER CONDITIONS WHICH DIFFER<br>FROM EN 374, CONTACT THE SUPPLIER OF THE CE<br>APPROVED GLOVES. THIS RECOMMENDATION IS<br>ADVISORY ONLY AND MUST BE EVALUATED BY AN<br>INDUSTRIAL HYGIENIST AND SAFETY OFFICER FAMILIAR<br>WITH THE SPECIFIC SITUATION OF ANTICIPATED USE BY<br>OUR CUSTOMERS. IT SHOULD NOT BE CONSTRUED AS<br>OFFERING AN APPROVAL FOR ANY SPECIFIC USE<br>SCENARIO.      |
| BODY PROTECTION                         | COMPLETE SUIT PROTECTING AGAINST CHEMICALS, THE<br>TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED<br>ACCORDING TO THE CONCENTRATION AND AMOUNT OF<br>THE DANGEROUS SUBSTANCE AT THE SPECIFIC<br>WORKPLACE.                                                                                                                                                                                                                                                |
| <b>RESPIRATORY</b><br><b>PROTECTION</b> | WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING<br>RESPIRATORS ARE APPROPRIATE USE A FULL-FACE<br>PARTICLE RESPIRATOR TYPE N100 (US) OR TYPE P3 (EN 143)<br>RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING<br>CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF<br>PROTECTION, USE A FULL-FACE SUPPLIED AIR<br>RESPIRATOR. USE RESPIRATORS AND COMPONENTS<br>TESTED AND APPROVED UNDER APPROPRIATE<br>GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN<br>(EU). |
| CONTROL OF<br>ENVIRONMENTAL<br>EXPOSURE | PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO<br>SO. DO NOT LET PRODUCT ENTER DRAINS.<br>DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.                                                                                                                                                                                                                                                                                                             |

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# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

| White crystalline powder                  |
|-------------------------------------------|
| ODOURLESS                                 |
| NO DATA AVAILABLE                         |
| 3 - 4 AT 50 G/L AT 20 C                   |
| 470 °C (dec.)                             |
|                                           |
|                                           |
|                                           |
|                                           |
| NO DATA AVAILABLE                         |
| THE PRODUCT IS NOT FLAMMABLE FLAMMABILITY |
| (SOLIDS)                                  |
| NO DATA AVAILABLE                         |
|                                           |
|                                           |
| AT 20 C - OECD TEST GUIDELINE 104LOW      |
| NO DATA AVAILABLE                         |
| 4.53 (Lit.)                               |
| 486 G/L AT 20 C - OECD TEST GUIDELINE 105 |
| NO DATA AVAILABLE                         |
|                                           |
| 400 C - NF T 20-036                       |
|                                           |
| NO DATA AVAILABLE                         |
|                                           |
| NO DATA AVAILABLE                         |
| NO DATA AVAILABLE                         |
| THE SUBSTANCE OR MIXTURE IS CLASSIFIED AS |
| OXIDIZING WITH THE CATEGORY 2.            |
|                                           |

#### **OTHER SAFETY INFORMATION**

NO DATA AVAILABLE

# SECTION 10. STABILITY AND REACTIVITY

| REACTIVITY                               | NO DATA AVAILABLE                            |
|------------------------------------------|----------------------------------------------|
| CHEMICAL STABILITY                       | STABLE UNDER RECOMMENDED STORAGE CONDITIONS. |
| POSSIBILITY OF<br>HAZARDOUS<br>REACTIONS | NO DATA AVAILABLE                            |
| CONDITIONS TO AVOID                      | NO DATA AVAILABLE                            |

| INCOMPATIBLE<br>MATERIALS              | NO DATA AVAILABLE                                                                                                                                                                                    |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HAZARDOUS<br>DECOMPOSITION<br>PRODUCTS | HAZARDOUS DECOMPOSITION PRODUCTS FORMED<br>UNDER FIRE CONDITIONS NITROGEN OXIDES (NOX),<br>LEAD OXIDES<br>OTHER DECOMPOSITION PRODUCTS - NO DATA<br>AVAILABLE<br>IN THE EVENT OF FIRE: SEE SECTION 5 |

#### SECTION 11. **TOXICOLOGICAL INFORMATION**

#### INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY NO DATA AVAILABLE

INHALATION: NO DATA AVAILABLE

DERMAL: NO DATA AVAILABLE

NO DATA AVAILABLE

| SKIN                 | SKIN - IN VITRO STUDY             |
|----------------------|-----------------------------------|
| CORROSION/IRRITATION | RESULT: NON-CORROSIVE             |
|                      | (OECD TEST GUIDELINE 431)         |
|                      | SKIN - IN VITRO STUDY             |
|                      | <b>RESULT: NO SKIN IRRITATION</b> |
|                      | (OECD TEST GUIDELINE 439)         |

| SERIOUS EYE           | EYES - IN VITRO STUDY                   |
|-----------------------|-----------------------------------------|
| DAMAGE/EYE IRRITATION | <b>RESULT: SEVERE IRRITATIONS - 4 H</b> |
|                       | (OECD TEST GUIDELINE 437)               |

**RESPIRATORY OR SKIN** (IN ANALOGY TO SIMILAR PRODUCTS) SENSITISATION

GERM CELL MUTAGENICITY

CARCINOGENICITY

NO DATA AVAILABLE

IARC: 2A - GROUP 2A: PROBABLY CARCINOGENIC TO HUMANS NTP: NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED CARCINOGEN BY NTP. NO COMPONENT OF THIS PRODUCT PRESENT AT OSHA: LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON OSHA S LIST OF REGULATED CARCINOGENS.

| REPRODUCTIVE TOXICITY<br>SPECIFIC TARGET ORGAN<br>TOXICITY - SINGLE<br>EXPOSURE | MAY DAMAGE THE UNBORN CHILD. POSITIVE<br>EVIDENCE FROM HUMAN EPIDEMIOLOGICAL<br>STUDIES.<br>MAY DAMAGE FERTILITY. POSITIVE EVIDENCE FROM<br>HUMAN EPIDEMIOLOGICAL STUDIES.<br>ACUTE INHALATION TOXICITY - POSSIBLE<br>DAMAGES:, MUCOSAL IRRITATIONS |
|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SPECIFIC TARGET ORGAN<br>TOXICITY - REPEATED<br>EXPOSURE                        | CAUSES DAMAGE TO ORGANS THROUGH<br>PROLONGED OR REPEATED EXPOSURE BLOOD,<br>CENTRAL NERVOUS SYSTEM, IMMUNE SYSTEM,<br>KIDNEY                                                                                                                        |
| ASPIRATION HAZARD                                                               | NO DATA AVAILABLE                                                                                                                                                                                                                                   |

ADDITIONAL INFORMATION

RTECS: OG2100000

LEAD SALTS HAVE BEEN REPORTED TO CROSS THE PLACENTA AND TO INDUCE EMBRYO- AND FETOMORTALITY. TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

SYSTEMIC EFFECTS: AFTER ABSORPTION: AFTER A LATENCY PERIOD: METALLIC TASTE, SALIVATION, VOMITING, DROP IN **BLOOD PRESSURE** A LETHAL EFFECT IS POSSIBLE AFTER THE UPTAKE OF LARGE QUANTITIES. THE FOLLOWING APPLIES TO LEAD COMPOUNDS IN GENERAL: DUE TO THE POOR ABSORBABILITY VIA THE GASTROINTESTINAL TRACT, ONLY VERY HIGH DOSES LEAD TO ACUTE CASES OF INTOXICATION. AFTER A LATENCY PERIOD OF SEVERAL HOURS, METALLIC TASTE, NAUSEA, VOMITING, AND COLICS OCCUR, IN MANY INSTANCES FOLLOWED BY SHOCK. CHRONIC UPTAKE CAUSES PERIPHERAL MUSCULAR WEAKNESS ("DROP-WRIST"), ANAEMIA, AND CENTRAL-NERVOUS DISORDERS. WOMEN OF CHILD-BEARING AGE SHOULD NOT BE EXPOSED TO THE SUBSTANCE OVER LONGER PERIODS OF TIME (OBSERVE CRITICAL THRESHOLD).

THE FOLLOWING APPLIES TO NITRITES/NITRATES IN GENERAL: METHAEMOGLOBINAEMIA AFTER THE UPTAKE OF LARGE QUANTITIES. OTHER DANGEROUS PROPERTIES CAN NOT BE EXCLUDED. THIS SUBSTANCE SHOULD BE HANDLED WITH PARTICULAR CARE.

STOMACH - IRREGULARITIES - BASED ON HUMAN EVIDENCE

## SECTION 12. ECOLOGICAL INFORMATION

| TOXICITY                |                                                   |
|-------------------------|---------------------------------------------------|
| TOXICITY TO DAPHNIA AND | EC50 - DAPHNIA MAGNA (WATER FLEA) - 1.8 MG/L - 48 |
| OTHER AQUATIC           | Н                                                 |
| INVERTEBRATES           | REMARKS: (ECOTOX DATABASE)                        |
| TOXICITY TO ALGAE       | EC50 - ALGAE - 0.024 - 0.029 MG/L - 28 H          |
|                         | REMARKS: (LIT.)                                   |

| PERSISTENCE AND<br>DEGRADABILITY      | NO DATA AVAILABLE                                                                                                                               |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| BIOACCUMULATIVE<br>POTENTIAL          | NO DATA AVAILABLE                                                                                                                               |
| MOBILITY IN SOIL                      | NO DATA AVAILABLE                                                                                                                               |
| RESULTS OF PBT AND<br>VPVB ASSESSMENT | PBT/VPVB ASSESSMENT NOT AVAILABLE AS<br>CHEMICAL SAFETY ASSESSMENT NOT<br>REQUIRED/NOT CONDUCTED                                                |
| OTHER ADVERSE EFFECTS                 | AN ENVIRONMENTAL HAZARD CANNOT BE<br>EXCLUDED IN THE EVENT OF UNPROFESSIONAL<br>HANDLING OR DISPOSAL.                                           |
|                                       | VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.                                                                                           |
|                                       | DEPENDING ON THE CONCENTRATION, PHOSPHORUS<br>AND/OR NITROGEN COMPOUNDS MAY CONTRIBUTE<br>TO THE EUTROPHICATION OF DRINKING- WATER<br>SUPPLIES. |
|                                       | DISCHARGE INTO THE ENVIRONMENT MUST BE<br>AVOIDED                                                                                               |

# SECTION 13. DISPOSAL CONSIDERATIONS

# WASTE TREATMENT METHODS

| PRODUCT | OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS    |
|---------|-----------------------------------------------|
|         | TO A LICENSED DISPOSAL COMPANY. BURN IN A     |
|         | CHEMICAL INCINERATOR EQUIPPED WITH AN         |
|         | AFTERBURNER AND SCRUBBER BUT EXERT EXTRA      |
|         | CARE IN IGNITING AS THIS MATERIAL IS HIGHLY   |
|         | FLAMMABLE. CONTACT A LICENSED PROFESSIONAL    |
|         | WASTE DISPOSAL SERVICE TO DISPOSE OF THIS     |
|         | MATERIAL. DISSOLVE OR MIX THE MATERIAL WITH A |
|         | COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL    |
|         | INCINERATOR EQUIPPED WITH AN AFTERBURNER AND  |
|         | SCRUBBER.                                     |
|         |                                               |

# CONTAMINATEDDISPOSE OF AS UNUSED PRODUCT.PACKAGING

# SECTION 14. TRANSPORT INFORMATION

| DOT (US)              |              |
|-----------------------|--------------|
| PROPER SHIPPING NAME: | LEAD NITRATE |
| UN NUMBER:            | 1469         |
| CLASS:                | 5.1 (6.1)    |
| PACKING GROUP:        | II           |
| REPORTABLE QUANTITY   | 10 LBS       |
| (RQ):                 |              |
| MARINE POLLUTANT:     | YES          |
| POISON INHALATION     | NO           |
| HAZARD:               |              |
|                       |              |
| IMDG                  |              |
| PROPER SHIPPING NAME: | LEAD NITRATE |
| UN NUMBER:            | 1469         |
| CLASS:                | 5.1 (6.1)    |
| PACKING GROUP:        | II           |
| EMS-NO:               | F-A, S-Q     |
| MARINE POLLUTANT:     | YES          |
|                       |              |
| IATA                  |              |
| PROPER SHIPPING NAME: | LEAD NITRATE |
| UN NUMBER:            | 1469         |
| CLASS:                | 5.1 (6.1)    |
| CLASS:                | 5.1 (0.1)    |

#### SECTION 15. REGULATORY INFORMATION

| SARA 302 COMPONENTS | NO CHEMICALS IN THIS M<br>THE REPORTING REQUIRE<br>SECTION 302.                                                                     |            |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------|
| SARA 313 COMPONENTS | THE FOLLOWING COMPONENTS ARE SUBJECT TO<br>REPORTING LEVELS ESTABLISHED BY SARA TITLE III,<br>SECTION 313:<br>CAS-NO. REVISION DATE |            |
| Lead(II) nitrate    | 10099-74-8                                                                                                                          | 02-16-1993 |

#### SARA 311/312 HAZARDS

PACKING GROUP:

REACTIVITY HAZARD, ACUTE HEALTH HAZARD, CHRONIC HEALTH HAZARD

# MASSACHUSETTS RIGHT TO KNOW COMPONENTS

Π

NO COMPONENTS ARE SUBJECT TO THE MASSACHUSETTS RIGHT TO KNOW ACT.

# PENNSYLVANIA RIGHT TO KNOW COMPONENTS

|                  | CAS-NO.    | REVISION DATE |
|------------------|------------|---------------|
| Lead(II) nitrate | 10099-74-8 | 02-16-1993    |

#### SECTION 16. OTHER INFORMATION

#### FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.

| H272        | MAY INTENSIFY FIRE; OXIDISER.                |
|-------------|----------------------------------------------|
| H302 + H332 | HARMFUL IF SWALLOWED OR IF INHALED           |
| H318        | CAUSES SERIOUS EYE DAMAGE.                   |
| H350        | MAY CAUSE CANCER.                            |
| H360        | MAY DAMAGE FERTILITY OR THE UNBORN CHILD.    |
| H372        | CAUSES DAMAGE TO ORGANS (BLOOD, CENTRAL      |
|             | NERVOUS SYSTEM, IMMUNE SYSTEM, KIDNEY)       |
|             | THROUGH PROLONGED OR REPEATED EXPOSURE.      |
| H410        | VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING |
|             | EFFECTS.                                     |

| MSDS LEGEND  |                                                  |
|--------------|--------------------------------------------------|
| MW:          | MOLECULAR WEIGHT                                 |
| MF:          | MOLECULAR FORMULA                                |
| VOC:         | VOLATILE ORGANIC COMPOUNDS                       |
| ACGIH:       | AMERICAN CONFERENCE OF GOVERNMENENTAL INDUSTRIAL |
|              | HYGINISTS                                        |
| CAS:         | CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER        |
| OSHA:        | OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION    |
| PEL:         | PERMISSIBLE EXPOSURE LIMIT (OSHA)                |
| TLV:         | THRESHOLD LIMIT VALUE (ACGIH)                    |
| IM (DODTANT. |                                                  |

IMPORTANT:

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VERSION:3.1

*REVISION DATE: 01/27/2017*