# **Chem-Impex International Inc.**

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# SAFETY DATA SHEET

# SECTION 1. CHEMICAL IDENTIFICATION

| CATALOG #:                      | 36512   |
|---------------------------------|---|
| NAME:                           | Lithium hexafluorophosphate                         |
| SYNONYMS:                       | Lithium phosphorus fluoride                         |
| 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) ACUTE TOXICITY, ORAL (CATEGORY 3), H301 SKIN CORROSION (CATEGORY 1A), H314 SERIOUS EYE DAMAGE (CATEGORY 1), H318

# SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE, INHALATION (CATEGORY 1), BONE, TEETH, H372

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

# GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM

SIGNAL WORD



## HAZARD STATEMENT(S)

| H301 | TOXIC IF SWALLOWED.                           |
|------|---|
| H314 | CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.      |
| H372 | CAUSES DAMAGE TO ORGANS (BONE, TEETH) THROUGH |
|      | PROLONGED OR REPEATED EXPOSURE IF INHALED.    |

## **PRECAUTIONARY STATEMENT(S)**

| P260                 | DO NOT BREATHE DUST OR MIST.                        |
|----------------------|---|
| P264                 | WASH SKIN THOROUGHLY AFTER HANDLING.                |
| P270                 | DO NOT EAT, DRINK OR SMOKE WHEN USING THIS          |
|                      | PRODUCT.  |
| P280                 | WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE    |
|                      | PROTECTION/ FACE PROTECTION.                        |
| P301 + P310 + P330   | IF SWALLOWED: IMMEDIATELY CALL A POISON             |
|                      | CENTER/DOCTOR. RINSE MOUTH.                         |
| P301 + P330 + P331   | IF SWALLOWED: RINSE MOUTH. DO NOT INDUCE            |
|                      | VOMITING.   |
| P303 + P361 + P353   | IF ON SKIN (OR HAIR): REMOVE/ TAKE OFF IMMEDIATELY  |
|                      | ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/   |
|                      | SHOWER.   |
| P304 + P340 + P310   | IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP     |
|                      | COMFORTABLE FOR BREATHING. IMMEDIATELY CALL A       |
|                      | POISON CENTER/DOCTOR.                               |
| 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/DOCTOR.                               |
| P314                 | GET MEDICAL ADVICE/ ATTENTION IF YOU FEEL UNWELL.   |
| P363                 | WASH CONTAMINATED CLOTHING BEFORE REUSE.            |
| P405                 | STORE LOCKED UP.                                    |
| P501                 | DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED       |
|                      | WASTE DISPOSAL PLANT.                               |
| HAZARDS NOT          | STRONG HYDROGEN FLUORIDE-RELEASER                   |
| OTHERWISE            |   |
| CLASSIFIED (HNOC)    |   |
| OD NOT COVEDED       |   |

OR NOT COVERED

BY GHS

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| MF:     | LiPF <sub>6</sub>               |
|---------|---------------------------------|
| MW:     | 151.91                          |
| CAS-NO. | 21324-40-3                      |
| PURITY: | $\geq$ 98% (Assay by titration) |

#### **HAZARDOUS COMPONENTS**

| COMPONENT              | CLASSIFICATION             | CONCENTRATION |
|------------------------|----------------------------|---------------|
| Lithium hexafluorophos | sphate                     |               |
|                        | ACUTE TOX. 3; SKIN CORR.   | <= 100 %      |
|                        | 1A; EYE DAM. 1; STOT RE 1; |               |
|                        | H301, H314, H318, H372     |               |

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** HYDROFLUORIC (HF) ACID BURNS REQUIRE IMMEDIATE AND SPECIALIZED FIRST AID AND MEDICAL TREATMENT. SYMPTOMS MAY BE DELAYED UP TO 24 HOURS DEPENDING ON THE CONCENTRATION OF HF. AFTER DECONTAMINATION WITH WATER, FURTHER DAMAGE CAN OCCUR DUE TO PENETRATION/ABSORPTION OF THE FLUORIDE ION. TREATMENT SHOULD BE DIRECTED TOWARD BINDING THE FLUORIDE ION AS WELL AS THE EFFECTS OF EXPOSURE. SKIN EXPOSURES CAN BE TREATED WITH A 2.5% CALCIUM GLUCONATE GEL REPEATED UNTIL BURNING CEASES. MORE SERIOUS SKIN EXPOSURES MAY REQUIRE SUBCUTANEOUS CALCIUM GLUCONATE EXCEPT FOR DIGITAL AREAS UNLESS THE PHYSICIAN IS EXPERIENCED IN THIS TECHNIQUE, DUE TO THE POTENTIAL FOR TISSUE INJURY FROM INCREASED PRESSURE. ABSORPTION CAN READILY OCCUR THROUGH THE SUBUNGUAL AREAS AND SHOULD BE CONSIDERED WHEN UNDERGOING DECONTAMINATION. PREVENTION OF ABSORPTION OF THE FLUORIDE ION IN CASES OF INGESTION CAN BE OBTAINED BY GIVING MILK, CHEWABLE CALCIUM CARBONATE TABLETS OR MILK OF MAGNESIA TO CONSCIOUS VICTIMS. CONDITIONS SUCH AS HYPOCALCEMIA, HYPOMAGNESEMIA AND CARDIAC

ARRHYTHMIAS SHOULD BE MONITORED FOR, SINCE THEY CAN OCCUR AFTER EXPOSURE.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 NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. CONSULT A PHYSICIAN.
- IN CASE OF SKINFIRST TREATMENT WITH CALCIUM GLUCONATECONTACTPASTE.TAKE OFF CONTAMINATED CLOTHING ANDSHOES IMMEDIATELY. WASH OFF WITH SOAP ANDPLENTY OF WATER. TAKE VICTIM IMMEDIATELY TOHOSPITAL. CONSULT A PHYSICIAN.
- IN CASE OF EYERINSE THOROUGHLY WITH PLENTY OF WATER FOR ATCONTACTLEAST 15 MINUTES AND CONSULT APHYSICIAN.CONTINUE RINSING EYES DURING<br/>TRANSPORT TO HOSPITAL.
- IF SWALLOWED DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN.

MOST IMPORTANTTHE MOST IMPORTANT KNOWN SYMPTOMS ANDSYMPTOMS ANDEFFECTS ARE DESCRIBED IN THE LABELLING (SEEEFFECTS, BOTH ACUTESECTION 2.2) AND/OR IN SECTION 11AND DELAYEDSECTION 2.2) AND/OR IN SECTION 11

NO DATA AVAILABLE

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

# SECTION 5. FIRE AND EXPLOSION DATA

FURTHER INFORMATION NO DATA AVAILABLE

#### **EXTINGUISHING MEDIA**

| SUITABLE             | USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY |
|----------------------|--|
| EXTINGUISHING MEDIA  | CHEMICAL OR CARBON DIOXIDE.                  |
| SPECIAL HAZARDS      | OXIDES OF PHOSPHORUS, HYDROGEN FLUORIDE,     |
| ARISING FROM THE     | LITHIUM OXIDES                               |
| SUBSTANCE OR MIXTURE | NOT COMBUSTIBLE.                             |
| ADVICE FOR           | WEAR SELF-CONTAINED BREATHING APPARATUS FOR  |
| FIREFIGHTERS         | FIREFIGHTING IF NECESSARY.                   |

# SECTION 6. ACCIDENTAL RELEASE MEASURES

| PERSONAL<br>PRECAUTIONS,<br>PROTECTIVE<br>EQUIPMENT AND<br>EMERGENCY<br>PROCEDURES | WEAR RESPIRATORY PROTECTION. AVOID DUST<br>FORMATION. AVOID BREATHING VAPOURS, MIST OR<br>GAS. ENSURE ADEQUATE VENTILATION. EVACUATE<br>PERSONNEL TO SAFE AREAS. AVOID BREATHING DUST.<br>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.  |
| METHODS AND<br>MATERIALS FOR<br>CONTAINMENT AND<br>CLEANING UP                     | PICK UP AND ARRANGE DISPOSAL WITHOUT<br>CREATING DUST. SWEEP UP AND SHOVEL. 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.<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>HANDLE AND STORE UNDER INERT GAS. HYDROLYSES<br>READILY. AIR AND MOISTURE SENSITIVE. DO NOT<br>STORE IN GLASS KEEP IN A DRY PLACE<br>Store at RT, under inert gas   |
| 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

# COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

| COMPONENT           | CAS-NO.    | VALUE                                       | CONTROL<br>PARAMETERS | BASIS                    |
|---------------------|------------|---|-----------------------|--------------------------|
| Lithium             | 21324-40-3 | TWA   | 2.5 MG/M3             | USA. OCCUPATIONAL        |
| hexafluorophosphate |            |   |                       | EXPOSURE LIMITS (OSHA) - |
|                     |            |   |                       | TABLE Z-1 LIMITS FOR AIR |
|                     |            |   |                       | CONTAMINANTS             |
|                     | REMARKS    | CAS NUM                                     | IBER VARIES WI        | TH COMPOUND              |
|                     |            | TWA   | 2.5 MG/M3             | USA. ACGIH THRESHOLD     |
|                     |            |   |                       | LIMIT VALUES (TLV)       |
|                     |            | BONE DA                                     | MAGE                  |                          |
|                     |            | FLUOROSIS                                   |                       |                          |
|                     |            | SUBSTANCES FOR WHICH THERE IS A BIOLOGICAL  |                       |                          |
|                     |            | EXPOSURE INDEX OR INDICES (SEE BEI SECTION) |                       |                          |
|                     |            | NOT CLASSIFIABLE AS A HUMAN CARCINOGEN      |                       |                          |
|                     |            | VARIES                                      |                       |                          |
|                     |            | PEL   | 2.5 MG/M3             | CALIFORNIA PERMISSIBLE   |
|                     |            |   |                       | EXPOSURE LIMITS FOR      |
|                     |            |   |                       | CHEMICAL CONTAMINANTS    |

# **BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS**

| COMPONENT           | CAS-NO.    | PARAMETERS    | VALUE     | BIOLOGICAL    | BASIS         |
|---------------------|------------|---------------|-----------|---------------|---------------|
|                     |            |               |           | SPECIMEN      |               |
| Lithium             | 21324-40-3 | FLUORIDE      | 2 MG/L    | URINE         | ACGIH -       |
| hexafluorophosphate |            |               |           |               | BIOLOGICAL    |
|                     |            |               |           |               | EXPOSURE      |
|                     |            |               |           |               | INDICES (BEI) |
|                     | REMARKS    | PRIOR TO SHIF | T (16 HOU | RS AFTER EXP  | OSURE CEASES) |
|                     |            | FLUORIDE      | 3 MG/L    | URINE         | ACGIH -       |
|                     |            |               |           |               | BIOLOGICAL    |
|                     |            |               |           |               | EXPOSURE      |
|                     |            |               |           |               | INDICES (BEI) |
|                     |            | END OF SHIFT  | (AS SOON  | AS POSSIBLE A | AFTER         |
|                     |            | EXPOSURE CEA  | ASES)     |               |               |

# **EXPOSURE CONTROLS**

| APPROPRIATE | AVOID CONTACT WITH SKIN, EYES AND CLOTHING. WASH |
|-------------|--|
| ENGINEERING | HANDS BEFORE BREAKS AND IMMEDIATELY AFTER        |
| CONTROLS    | HANDLING THE PRODUCT.                            |

# PERSONAL PROTECTIVE EQUIPMENT

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

# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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# INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

| INFORMATION ON DASIC   | THISICALAND CHEWICALI KOI EKTIES               |
|------------------------|--|
| APPEARANCE             | White to off-white powder                      |
| ODOUR                  | NO DATA AVAILABLE                              |
| ODOUR THRESHOLD        | NO DATA AVAILABLE                              |
| PH                     | NO DATA AVAILABLE                              |
| MELTING                | 200 °C (dec.)                                  |
| POINT/FREEZING POINT   |  |
| INITIAL BOILING POINT  |  |
| AND BOILING RANGE      |  |
| FLASH POINT            |  |
| EVAPORATION RATE       | NO DATA AVAILABLE                              |
| FLAMMABILITY (SOLID,   | THE PRODUCT IS NOT FLAMMABLE FLAMMABILITY      |
| GAS)                   | (SOLIDS)                                       |
| UPPER/LOWER            | NO DATA AVAILABLE                              |
| FLAMMABILITY OR        |  |
| EXPLOSIVE LIMITS       |  |
| VAPOUR PRESSURE        | NO DATA AVAILABLE                              |
| VAPOUR DENSITY         | NO DATA AVAILABLE                              |
| RELATIVE DENSITY       | 1.5  |
| WATER SOLUBILITY       | NO DATA AVAILABLE                              |
| PARTITION COEFFICIENT: | NO DATA AVAILABLE                              |
| N- OCTANOL/WATER       |  |
| AUTO-IGNITION          | NO DATA AVAILABLE                              |
| TEMPERATURE            |  |
| DECOMPOSITION          | >175 C   |
| TEMPERATURE            |  |
| VISCOSITY              | NO DATA AVAILABLE                              |
| EXPLOSIVE PROPERTIES   | NOT EXPLOSIVE                                  |
| OXIDIZING PROPERTIES   | THE PRODUCT HAS BEEN SHOWN NOT TO BE           |
|                        | OXIDIZING IN A TEST FOLLOWING DIRECTIVE        |
|                        | 67/548/EEC (METHOD A17, OXIDIZING PROPERTIES). |
|                        |  |
|                        |  |

INFORMATION

**OTHER SAFETY** 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                      | REACTS DANGEROUSLY WITH GLASS.               |
| INCOMPATIBLE<br>MATERIALS                | GLASS  |

HAZARDOUS DECOMPOSITION PRODUCTS HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS. - OXIDES OF PHOSPHORUS, HYDROGEN FLUORIDE, LITHIUM OXIDES OTHER DECOMPOSITION PRODUCTS - NO DATA AVAILABLE IN THE EVENT OF FIRE: SEE SECTION 5

# SECTION 11. TOXICOLOGICAL INFORMATION

#### INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY LD50 ORAL - RAT - FEMALE - > 50 - 300 MG/KG (OECD TEST GUIDELINE 423)

INHALATION: NO DATA AVAILABLE

NO COMPONENT OF THIS PRODUCT PRESENT AT

DERMAL: NO DATA AVAILABLE

NO DATA AVAILABLE

| SKIN                 | SKIN - HUMAN                            |
|----------------------|---|
| CORROSION/IRRITATION | RESULT: CAUSES SEVERE BURNS.            |
|                      | (SKIN CORROSION: HUMAN SKIN MODEL TEST) |

SERIOUS EYE NO DATA AVAILABLE DAMAGE/EYE IRRITATION

**RESPIRATORY OR SKIN**IN VIVO ASSAY - MOUSE**SENSITISATION**RESULT: DOES NOT CAUSE SKIN SENSITISATION.<br/>(OECD TEST GUIDELINE 429)

| GERM CELL    | AMES TEST               |
|--------------|-------------------------|
| MUTAGENICITY | S. TYPHIMURIUM          |
|              | <b>RESULT: NEGATIVE</b> |

CARCINOGENICITY IARC:

LEVELS GREATER THAN OR EQUAL TO 0.1% IS<br/>IDENTIFIED AS PROBABLE, POSSIBLE OR<br/>CONFIRMED HUMAN CARCINOGEN BY IARC.NTP:NO COMPONENT OF THIS PRODUCT PRESENT AT<br/>LEVELS GREATER THAN OR EQUAL TO 0.1% IS<br/>IDENTIFIED AS A KNOWN OR ANTICIPATED<br/>CARCINOGEN BY NTP.OSHA:NO COMPONENT OF THIS PRODUCT PRESENT AT<br/>LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON<br/>OSHA S LIST OF REGULATED CARCINOGENS.

**REPRODUCTIVE TOXICITY** NO DATA AVAILABLE

| SPECIFIC TARGET ORGAN<br>TOXICITY - SINGLE<br>EXPOSURE   | NO DATA AVAILABLE  |
|--|--|
| SPECIFIC TARGET ORGAN<br>TOXICITY - REPEATED<br>EXPOSURE | NO DATA AVAILABLE  |
| ASPIRATION HAZARD  | NO DATA AVAILABLE  |
| ADDITIONAL<br>INFORMATION                                | REPEATED DOSE TOXICITY - NO DATA AVAILABLE   |
|  | RTECS: NOT AVAILABLE   |
|  | FLUORIDE ION CAN REDUCE SERUM CALCIUM<br>LEVELS POSSIBLY CAUSING FATAL HYPOCALCEMIA.   |
|  | BURNING SENSATION, COUGH, WHEEZING,<br>LARYNGITIS, SHORTNESS OF BREATH, SPASM,<br>INFLAMMATION AND EDEMA OF THE LARYNX,<br>SPASM, INFLAMMATION AND EDEMA OF THE<br>BRONCHI, PNEUMONITIS, PULMONARY EDEMA,<br>MATERIAL IS EXTREMELY DESTRUCTIVE TO TISSUE<br>OF THE MUCOUS MEMBRANES AND UPPER<br>RESPIRATORY TRACT, EYES, AND SKIN. TO THE BEST<br>OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL,<br>AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN<br>THOROUGHLY INVESTIGATED. |

# SECTION 12. ECOLOGICAL INFORMATION

| <b>TOXICITY</b><br>TOXICITY TO DAPHNIA AND<br>OTHER AQUATIC<br>INVERTEBRATES<br>TOXICITY TO ALGAE<br>TOXICITY TO BACTERIA | STATIC TEST EC50 - DAPHNIA MAGNA (WATER FLEA) -<br>> 100 MG/L - 48 H<br>(OECD TEST GUIDELINE 202)<br>STATIC TEST EC50 - PSEUDOKIRCHNERIELLA<br>SUBCAPITATA - > 100 MG/L - 76 H<br>(OECD TEST GUIDELINE 201)<br>RESPIRATION INHIBITION EC50 - SLUDGE<br>TREATMENT - > 1,000 MG/L - 3 H<br>(OECD TEST GUIDELINE 209) |
|---|--|
| PERSISTENCE AND<br>DEGRADABILITY  | NO DATA AVAILABLE  |
| BIOACCUMULATIVE<br>POTENTIAL  | NO DATA AVAILABLE  |
| MOBILITY IN SOIL  | NO DATA AVAILABLE  |

\_\_\_\_\_

# RESULTS OF PBT ANDPBT/VPVB ASSESSMENT NOT AVAILABLE ASVPVB ASSESSMENTCHEMICAL SAFETY ASSESSMENT NOT<br/>REQUIRED/NOT CONDUCTED

**OTHER ADVERSE EFFECTS** NO DATA AVAILABLE

# SECTION 13. DISPOSAL CONSIDERATIONS

#### WASTE TREATMENT METHODS

| PRODUCT | OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS       |
|---------|--|
|         | TO A LICENSED DISPOSAL COMPANY. 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.                        |
|         |  |

CONTAMINATED DISPOSE OF AS UNUSED PRODUCT. PACKAGING

# SECTION 14. TRANSPORT INFORMATION

| DOT (US)              |  |
|-----------------------|--|
| PROPER SHIPPING NAME: | CORROSIVE SOLIDS, TOXIC, N.O.S. (LITHIUM |
|                       | HEXAFLUOROPHOSPHATE(1-))                 |
| UN NUMBER:            | 2923                                     |
| CLASS:                | 8 (6.1)                                  |
| PACKING GROUP:        | Ι  |
| Reportable Quantity   |  |
| (RQ):                 |  |
| POISON INHALATION     | NO                                       |
| HAZARD:               |  |
|                       |  |
| IMDG                  |  |
| PROPER SHIPPING NAME: | CORROSIVE SOLIDS, TOXIC, N.O.S. (LITHIUM |
|                       | HEXAFLUOROPHOSPHATE(1-))                 |
| UN NUMBER:            | 2923                                     |
| CLASS:                | 8 (6.1)                                  |
| PACKING GROUP:        | I  |
| EMS-NO:               | F-A, S-B                                 |
|                       |  |
| IATA                  |  |
| PROPER SHIPPING NAME: | CORROSIVE SOLIDS, TOXIC, N.O.S. (LITHIUM |
|                       | HEXAFLUOROPHOSPHATE(1-))                 |
|                       |  |

| UN NUMBER:     | 2923    |
|----------------|---------|
| CLASS:         | 8 (6.1) |
| PACKING GROUP: | Ι       |

## SECTION 15. REGULATORY INFORMATION

| SARA 302 COMPONENTS                       | THIS MATERIAL DOES NOT CONTAIN ANY<br>COMPONENTS WITH A SECTION 302 EHS TPQ.   |
|---|--|
| SARA 313 COMPONENTS                       | THIS MATERIAL DOES NOT CONTAIN ANY CHEMICAL<br>COMPONENTS WITH KNOWN CAS NUMBERS THAT<br>EXCEED THE THRESHOLD (DE MINIMIS) REPORTING<br>LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313. |
| SARA 311/312 HAZARDS                      | ACUTE HEALTH HAZARD  |
| MASSACHUSETTS RIGHT<br>TO KNOW COMPONENTS | NO COMPONENTS ARE SUBJECT TO THE<br>MASSACHUSETTS RIGHT TO KNOW ACT.   |

# SECTION 16. OTHER INFORMATION

| FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3. |   |  |
|---|---|--|
| H301  | TOXIC IF SWALLOWED.                       |  |
| H314  | CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.  |  |
| H372  | CAUSES DAMAGE TO ORGANS (BONE, TEETH)     |  |
|   | THROUGH PROLONGED OR REPEATED EXPOSURE IF |  |
|   | INHALED.                                  |  |

| 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)                    |
| IMPORTANT:  |  |

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