# **Chem-Impex International Inc.**

Tel: (630) 766-2112 E-mail: <u>sales@chemimpex.com</u> Shipping and Correspondence: 935 Dillon Drive Wood Dale, IL 60191 USA Fax: (630) 766-2218 Web site: www.chemimpex.com Manufacturing site: 825 Dillon Drive Wood Dale, IL 60191 USA

## SAFETY DATA SHEET

#### SECTION 1. CHEMICAL IDENTIFICATION

|          | CATALOG #:           | 30204                        |
|----------|----------------------|------------------------------|
|          | NAME:                | Lead(II) chromate            |
|          | SYNONYMS:            | Lead chromate                |
|          | 24 HOUR EMERGENCY    | (800) 535-5053(USA)          |
| TELEPHON | TELEPHONE:           | 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) CARCINOGENICITY (CATEGORY 1A), H350 REPRODUCTIVE TOXICITY (CATEGORY 1A), H360

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE (CATEGORY 2), H373 ACUTE AQUATIC TOXICITY (CATEGORY 1), H400 CHRONIC AQUATIC TOXICITY (CATEGORY 2), H411

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) |   |  |  |
|---------------------|---|--|--|
| H350                | MAY CAUSE CANCER.                       |  |  |
| H360                | MAY DAMAGE FERTILITY OR THE UNBORN      |  |  |
|                     | CHILD.                                  |  |  |
| H373                | MAY CAUSE DAMAGE TO ORGANS THROUGH      |  |  |
|                     | PROLONGED OR REPEATED EXPOSURE.         |  |  |
| H400                | VERY TOXIC TO AQUATIC LIFE.             |  |  |
| H411                | TOXIC TO AQUATIC LIFE WITH LONG LASTING |  |  |
|                     | EFFECTS.                                |  |  |

#### PRECAUTIONARY STATEMENT(S)

| PRECAUTIONARY STATEMENT(S) |   |  |  |  |
|----------------------------|---|--|--|--|
| P201                       | OBTAIN SPECIAL INSTRUCTIONS BEFORE USE. |  |  |  |
| P202                       | DO NOT HANDLE UNTIL ALL SAFETY          |  |  |  |
|                            | PRECAUTIONS HAVE BEEN READ AND          |  |  |  |
|                            | UNDERSTOOD.                             |  |  |  |
| P260                       | DO NOT BREATHE DUST/ FUME/ GAS/ MIST/   |  |  |  |
|                            | VAPOURS/ SPRAY.                         |  |  |  |
| P273                       | AVOID RELEASE TO THE ENVIRONMENT.       |  |  |  |
| P281                       | USE PERSONAL PROTECTIVE EQUIPMENT AS    |  |  |  |
|                            | REQUIRED.                               |  |  |  |
| P308 + P313                | IF EXPOSED OR CONCERNED: GET MEDICAL    |  |  |  |
|                            | ADVICE/ ATTENTION.                      |  |  |  |
| P391                       | COLLECT SPILLAGE.                       |  |  |  |
| P405                       | STORE LOCKED UP.                        |  |  |  |
| P501                       | DISPOSE OF CONTENTS/ CONTAINER TO AN    |  |  |  |
|                            | APPROVED WASTE DISPOSAL PLANT.          |  |  |  |
| RESERVED FOR PROFE         | SSIONAL USE                             |  |  |  |
| HAZARDS NOT                | NONE                                    |  |  |  |
| OTHERWISE                  |   |  |  |  |
| CLASSIFIED (HNOC)          |   |  |  |  |
| OR NOT COVERED             |   |  |  |  |
| BY GHS                     |   |  |  |  |
|                            |   |  |  |  |

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

| MW: | 323.19 |
|-----|--------|
|     |        |

CAS-NO. 7758-97-6

PURITY:  $\geq$  98% (Assay by titration)

## HAZARDOUS COMPONENTS

| COMPONENT  | CLASSIFICATION                       | CONCENTRATION             |  |  |  |  |
|--|--------------------------------------|---------------------------|--|--|--|--|
| LEAD CHROMATE INC  | CLUDED IN THE CANDIDATE LIST         | OF SUBSTANCES OF VERY     |  |  |  |  |
| HIGH CONCERN (SVHC   | ) ACCORDING TO REGULATION (          | EC) NO. 1907/2006 (REACH) |  |  |  |  |
|  | CARC. 1A; REPR. 1A; STOT RE <= 100 % |                           |  |  |  |  |
|  | 2; AQUATIC ACUTE 1;                  |                           |  |  |  |  |
|  | AQUATIC CHRONIC 2; H350,             |                           |  |  |  |  |
|  | H360, H373, H400, H411               |                           |  |  |  |  |
| FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE |                                      |                           |  |  |  |  |

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 |  |  |
|                                   | NOT BREATHING, GIVE ARTIFICIAL RESPIRATION.    |  |  |
|                                   |  |  |  |
|                                   | CONSULT A PHYSICIAN.                           |  |  |
|                                   |  |  |  |
| IN CASE OF SKIN                   | WASH OFF WITH SOAP AND PLENTY OF WATER.        |  |  |
| CONTACT                           | CONSULT A PHYSICIAN.                           |  |  |
|                                   |  |  |  |
| IN CASE OF EYE                    | FLUSH EYES WITH WATER AS A PRECAUTION.         |  |  |
| CONTACT                           |  |  |  |
|                                   |  |  |  |
| IF SWALLOWED                      | NEVER GIVE ANYTHING BY MOUTH TO AN             |  |  |
|                                   | UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER.    |  |  |
|                                   | CONSULT A PHYSICIAN.                           |  |  |
|                                   | CONSULTATITISICIAN.                            |  |  |
| MOST IMPORTANT                    | THE MOST IMPORTANT KNOWN SYMPTOMS AND          |  |  |
|                                   |  |  |  |
| SYMPTOMS AND                      | EFFECTS ARE DESCRIBED IN THE LABELLING (SEE    |  |  |
| EFFECTS, BOTH ACUTE               | SECTION 2.2) AND/OR IN SECTION 11              |  |  |
| AND DELAYED                       |  |  |  |
|                                   |  |  |  |
| INDICATION OF ANY                 | NO DATA AVAILABLE                              |  |  |
| IMMEDIATE MEDICAL                 |  |  |  |
| ATTENTION AND SPECIAL             |  |  |  |
| TREATMENT NEEDED                  |  |  |  |
| I KEAI WENT NEEDED                |  |  |  |

#### SECTION 5. FIRE AND EXPLOSION DATA

| <b>EXTINGUISHING MEDIA</b><br>SUITABLE EXTINGUISHING<br>MEDIA | USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY<br>CHEMICAL OR CARBON DIOXIDE. |
|---|---|
| SPECIAL HAZARDS<br>ARISING FROM THE<br>SUBSTANCE OR MIXTURE   | LEAD OXIDES, CHROMIUM OXIDES  |
| ADVICE FOR<br>FIREFIGHTERS                                    | WEAR SELF-CONTAINED BREATHING APPARATUS FOR<br>FIREFIGHTING IF NECESSARY.   |
| FURTHER INFORMATION   | NO DATA AVAILABLE   |

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

| PERSONAL PRECAUTIONS, | USE PERSONAL PROTECTIVE EQUIPMENT. AVOID DUST  |
|-----------------------|--|
| PROTECTIVE EQUIPMENT  | FORMATION. AVOID BREATHING VAPOURS, MIST OR    |
| AND EMERGENCY         | GAS. ENSURE ADEQUATE VENTILATION. EVACUATE     |
| PROCEDURES            | PERSONNEL TO SAFE AREAS. AVOID BREATHING DUST. |
|                       | FOR PERSONAL PROTECTION SEE SECTION 8.         |
|                       |  |
| ENVIRONMENTAL         | PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE    |
| PRECAUTIONS           | TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.     |
|                       | DISCHARGE INTO THE ENVIRONMENT MUST BE         |
|                       | AVOIDED.                                       |
|                       |  |
| METHODS AND           | PICK UP AND ARRANGE DISPOSAL WITHOUT           |
| MATERIALS FOR         | CREATING DUST. SWEEP UP AND SHOVEL. KEEP IN    |
| CONTAINMENT AND       | SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.      |
| CLEANING UP           |  |
|                       |  |
| REFERENCE TO OTHER    | FOR DISPOSAL SEE SECTION 13.                   |
| SECTIONS              |  |
|                       |  |

## SECTION 7. HANDLING AND STORAGE

| PRECAUTIONS FOR SAFE | AVOID CONTACT WITH SKIN AND EYES. AVOID     |
|----------------------|---|
| HANDLING             | FORMATION OF DUST AND AEROSOLS.FURTHER      |
|                      | PROCESSING OF SOLID MATERIALS MAY RESULT IN |
|                      | THE FORMATION OF COMBUSTIBLE DUSTS. THE     |
|                      | POTENTIAL FOR COMBUSTIBLE DUST FORMATION    |
|                      | SHOULD BE TAKEN INTO CONSIDERATION BEFORE   |
|                      | ADDITIONAL PROCESSING OCCURS.               |
|                      | PROVIDE APPROPRIATE EXHAUST VENTILATION AT  |
|                      | PLACES WHERE DUST IS FORMED.                |
|                      | 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>KEEP IN A DRY PLACE.<br>STORAGE CLASS (TRGS 510): NON-COMBUSTIBLE,<br>ACUTE TOXIC CAT.3 / TOXIC HAZARDOUS MATERIALS<br>OR HAZARDOUS MATERIALS CAUSING CHRONIC<br>EFFECTS |
|--|--|
| 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<br>COMPONENTS WITH WORKPLACE CONTROL PARAMETERS |           |           |                  |                          |
|--|-----------|-----------|------------------|--------------------------|
| COMPONENTS V   |           | VALUE     | CONTROL          | BASIS                    |
| COMPONENT  | CAS-NO.   | VALUE     | PARAMETERS       | BASIS                    |
| LEAD   | 7758-97-6 | TWA       | 0.012 MG/M3      | USA. ACGIH               |
| CHROMATE   | 1150-51-0 | 1 9973    | 0.012 100/1015   | THRESHOLD                |
| CIIICOULILL  |           |           |                  | LIMIT VALUES             |
|  |           |           |                  | (TLV)                    |
|  | REMARKS   | MALE REPR | ODUCTIVE DAMAG   |                          |
|  |           | TERATOGEN | NIC EFFECTS      |                          |
|  |           | VASOCONS  | FRICTION         |                          |
|  |           | SUBSTANCI | ES FOR WHICH THE | RE IS A BIOLOGICAL       |
|  |           | EXPOSURE  | INDEX OR INDICES | (SEE BEI SECTION)        |
|  |           | SUSPECTED | HUMAN CARCINO    | GEN                      |
|  |           | TWA       | 0.05 MG/M3       | USA. ACGIH               |
|  |           |           |                  | THRESHOLD                |
|  |           |           |                  | LIMIT VALUES             |
|  |           |           |                  | (TLV)                    |
|  |           |           | ODUCTIVE DAMAG   | ЪΕ                       |
|  |           |           | NIC EFFECTS      |                          |
|  |           | VASOCONS' |                  |                          |
|  |           |           |                  | RE IS A BIOLOGICAL       |
|  |           |           |                  | (SEE BEI SECTION)        |
|  |           |           | HUMAN CARCINO    |                          |
|  |           | TWA       | 0.0050 MG/M3     | USA.                     |
|  |           |           |                  | OCCUPATIONAL             |
|  |           |           |                  | EXPOSURE                 |
|  |           |           |                  | LIMITS<br>(OSHA) - TABLE |
|  |           |           |                  | Z-1 LIMITS FOR           |
|  |           |           |                  | AIR                      |
|  |           |           |                  | CONTAMINANTS             |
|  |           |           |                  | CONTAININANTS            |

| CEIL | 0.0010 MG/M3 | USA.<br>OCCUPATIONAL<br>EXPOSURE<br>LIMITS<br>(OSHA) - TABLE<br>Z-2          |
|------|--------------|--|
| CEIL | 0.1 MG/M3    | USA. OSHA -<br>TABLE Z-1<br>LIMITS FOR<br>AIR<br>CONTAMINANTS<br>- 1910.1000 |
| TWA  | 0.075 MG/M3  | USA. OSHA -<br>TABLE Z-1<br>LIMITS FOR<br>AIR<br>CONTAMINANTS<br>- 1910.1000 |

#### **EXPOSURE CONTROLS**

| APPROPRIATE                   | HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL      |  |
|-------------------------------|--|--|
| ENGINEERING                   | HYGIENE AND SAFETY PRACTICE. WASH HANDS        |  |
| CONTROLS                      | BEFORE BREAKS AND AT THE END OF WORKDAY.       |  |
| PERSONAL PROTECTIVE EQUIPMENT |  |  |
| EYE/FACE PROTECTION           | SAFETY GLASSES WITH SIDE-SHIELDS CONFORMING TO |  |
|                               | EN166 USE EQUIPMENT FOR 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<br>PRIOR TO USE. USE PROPER GLOVE REMOVAL<br>TECHNIQUE (WITHOUT TOUCHING GLOVE''S OUTER<br>SURFACE) TO AVOID SKIN CONTACT WITH THIS<br>PRODUCT. DISPOSE OF CONTAMINATED GLOVES AFTER<br>USE IN ACCORDANCE WITH APPLICABLE LAWS AND<br>GOOD LABORATORY PRACTICES. WASH AND DRY<br>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<br>FAMILIAR WITH THE SPECIFIC SITUATION OF<br>ANTICIPATED USE BY OUR CUSTOMERS. IT SHOULD<br>NOT BE CONSTRUED AS OFFERING AN APPROVAL FOR<br>ANY SPECIFIC USE SCENARIO.      |
| BODY PROTECTION                         | COMPLETE SUIT PROTECTING AGAINST CHEMICALS,<br>THE TYPE OF PROTECTIVE EQUIPMENT MUST BE<br>SELECTED ACCORDING TO THE CONCENTRATION AND<br>AMOUNT OF THE DANGEROUS SUBSTANCE AT THE<br>SPECIFIC WORKPLACE.  |
| RESPIRATORY<br>PROTECTION               | WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING<br>RESPIRATORS ARE APPROPRIATE USE A FULL-FACE<br>PARTICLE RESPIRATOR TYPE N100 (US) OR TYPE P3 (EN<br>143) RESPIRATOR CARTRIDGES AS A BACKUP TO<br>ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE<br>SOLE MEANS OF PROTECTION, USE A FULL-FACE<br>SUPPLIED AIR RESPIRATOR. USE RESPIRATORS AND<br>COMPONENTS TESTED AND APPROVED UNDER<br>APPROPRIATE GOVERNMENT STANDARDS SUCH AS<br>NIOSH (US) OR CEN (EU). |
| CONTROL OF<br>ENVIRONMENTAL<br>EXPOSURE | PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO<br>DO SO. DO NOT LET PRODUCT ENTER DRAINS.<br>DISCHARGE INTO THE ENVIRONMENT MUST BE<br>AVOIDED.  |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

| APPEARANCE             | Yellow to deep yellow or orange powder |
|------------------------|--|
| ODOUR                  | NO DATA AVAILABLE                      |
| ODOUR THRESHOLD        | NO DATA AVAILABLE                      |
| PH                     | NO DATA AVAILABLE                      |
| MELTING                | 844 °C (Approx.)                       |
| POINT/FREEZING POINT   |  |
| BOILING POINT          |  |
| FLASH POINT            |  |
| EVAPORATION RATE       | NO DATA AVAILABLE                      |
| FLAMMABILITY (SOLID,   | NO DATA AVAILABLE                      |
| GAS)                   |  |
| UPPER/LOWER            | NO DATA AVAILABLE                      |
| FLAMMABILITY OR        |  |
| EXPLOSIVE LIMITS       |  |
| VAPOUR PRESSURE        | NO DATA AVAILABLE                      |
| VAPOUR DENSITY         | NO DATA AVAILABLE                      |
| RELATIVE DENSITY       |  |
| WATER SOLUBILITY       | NO DATA AVAILABLE                      |
| PARTITION COEFFICIENT: | NO DATA AVAILABLE                      |
| N- OCTANOL/WATER       |  |
| AUTO-IGNITION          | NO DATA AVAILABLE                      |
| TEMPERATURE            |  |
| DECOMPOSITION          | NO DATA AVAILABLE                      |
| TEMPERATURE            |  |
| VISCOSITY              | NO DATA AVAILABLE                      |
| EXPLOSIVE PROPERTIES   | NO DATA AVAILABLE                      |
| OXIDIZING PROPERTIES   | NO DATA AVAILABLE                      |
| OTHER SAFETY           | NO DATA AVAILABLE                      |
| INFORMATION            |  |
|                        |  |

## SECTION 10. STABILITY AND REACTIVITY

| REACTIVITY                            | NO DATA AVAILABLE                            |
|---------------------------------------|--|
| CHEMICAL STABILITY                    | STABLE UNDER RECOMMENDED STORAGE CONDITIONS. |
| POSSIBILITY OF<br>HAZARDOUS REACTIONS | NO DATA AVAILABLE                            |
| CONDITIONS TO AVOID                   | NO DATA AVAILABLE                            |
| INCOMPATIBLE<br>MATERIALS             | ORGANIC MATERIALS, POWDERED METALS           |

HAZARDOUSOTHER DECOMPOSITION PRODUCTS - NO DATADECOMPOSITIONAVAILABLEPRODUCTSIN THE EVENT OF FIRE: SEE SECTION 5

## SECTION 11. TOXICOLOGICAL INFORMATION

| CHROMATE)<br>2A - GROUP 2A: PROBABLY CARCINOGENIC T<br>HUMANS (LEAD CHROMATE) IARC:<br>NTP:<br>KNOWN TO BE HUMAN CARCINOGEN (LEAD<br>CHROMATE)<br>REASONABLY ANTICIPATED TO BE A HUMAN<br>CARCINOGENTHE REFERENCE NOTE HAS BE<br>ADDED BY TD BASED ON THE BACKGROUNI   | INFORMATION ON TOXICOL<br>ACUTE TOXICITY               | LD50 ORAL - MOUSE - > 12,000 MG/KG   |
|--|--|--|
| NO DATA AVAILABLESKINNO DATA AVAILABLECORROSION/IRRITATIONNO DATA AVAILABLESERIOUS EYE DAMAGE/EYENO DATA AVAILABLEIRRITATIONNO DATA AVAILABLERESPIRATORY OR SKINNO DATA AVAILABLEGERM CELL MUTAGENICITYNO DATA AVAILABLECARCINOGENICITYNO DATA AVAILABLECARCINOGENICITYNO DATA AVAILABLECARCINOGENICITYNO DATA AVAILABLECARCINOGENICITYNO DATA AVAILABLECARCINOGENICITYNO DATA AVAILABLECARCINOGENICITY - RAT - INTRAMUSCULARTUMORIGENIC: TUMORS AT SITE OR APPLICATIONCARCINOGENICITY - RAT - SUBCUTANEOUSTUMORIGENIC: NEOPLASTIC BY RTECS CRITERIA. KIDNEY, URETER,<br>BLADDER: KIDNEY TUMORS. TUMORIGENIC: AGENT BY RTECS CRITERIA.CARCINOGENICITY - RAT - SUBCUTANEOUSTUMORIGENIC: TUMORS AT SITE OR APPLICATION.CARCINOGENICITY - RAT - SUBCUTANEOUSTUMORIGENIC: TUMORS AT SITE OR APPLICATION.CARCINOGENICITY - RAT - SUBCUTANEOUSTUMORIGENIC: TUMORS AT SITE OR APPLICATION.HUMAN CARCINOGEN.1 - GROUP 1: CARCINOGENIC TO HUMANS (LA<br>CHROMATE)ARC:1 - GROUP 1: CARCINOGENIC TO HUMANS (LA<br>CHROMATE)NTP:KNOWN TO BE HUMAN CARCINOGENIC TO<br>HUMANS (LEAD CHROMATE) IARC:NTP:KNOWN TO BE HUMAN CARCINOGEN (LEAD<br>CHROMATE)CARCINOGENTHE REFERENCE NOTE HAS BE<br>ADDED BY TD BASED ON THE BACKGROUNT |  | INHALATION: NO DATA AVAILABLE  |
| SKIN NO DATA AVAILABLE<br>CORROSION/IRRITATION<br>SERIOUS EYE DAMAGE/EYE NO DATA AVAILABLE<br>IRRITATION<br>RESPIRATORY OR SKIN NO DATA AVAILABLE<br>SENSITISATION<br>GERM CELL MUTAGENICITY NO DATA AVAILABLE<br>CARCINOGENICITY<br>CARCINOGENICITY - RAT - INTRAMUSCULAR<br>TUMORIGENIC:NEOPLASTIC BY RTECS CRITERIA. KIDNEY, URETER,<br>BLADDER:KIDNEY TUMORS. TUMORIGENIC:TUMORS AT SITE OR APPLICATIC<br>CARCINOGENICITY - RAT - SUBCUTANEOUS<br>TUMORIGENIC:NEOPLASTIC BY RTECS CRITERIA. TUMORIGENIC:TUMORS AT<br>OR APPLICATION.<br>CARCINOGENICITY - RAT - SUBCUTANEOUS<br>TUMORIGENIC:TY - RAT - SUBCUTANEOUS<br>TUMORIGENIC:TY - RAT - SUBCUTANEOUS<br>TUMORIGENIC:TOMORS AT SITE OR APPLICATION.<br>CARCINOGENICITY - RAT - SUBCUTANEOUS<br>TUMORIGENIC:TUMORS AT SITE OR APPLICATION.<br>HUMAN CARCINOGEN.<br>IARC: 1 - GROUP 1: CARCINOGENIC TO HUMANS (LI<br>CHROMATE)<br>2A - GROUP 2A: PROBABLY CARCINOGENIC T<br>HUMANS (LEAD CHROMATE) IARC:<br>NTP: KNOWN TO BE HUMAN CARCINOGEN (LEAD<br>CHROMATE)<br>REASONABLY ANTICIPATED TO BE A HUMAN<br>CARCINOGENTHE REFERENCE NOTE HAS BE<br>ADDED BY TD BASED ON THE BACKGROUNI  |  | DERMAL: NO DATA AVAILABLE  |
| CORROSION/IRRITATION SERIOUS EYE DAMAGE/EYE NO DATA AVAILABLE IRRITATION RESPIRATORY OR SKIN NO DATA AVAILABLE SENSITISATION GERM CELL MUTAGENICITY NO DATA AVAILABLE CARCINOGENICITY - RAT - INTRAMUSCULAR TUMORIGENIC:NEOPLASTIC BY RTECS CRITERIA. KIDNEY, URETER, BLADDER:KIDNEY TUMORS. TUMORIGENIC:TUMORS AT SITE OR APPLICATIC CARCINOGENICITY - RAT - SUBCUTANEOUS TUMORIGENIC:NEOPLASTIC BY RTECS CRITERIA. TUMORIGENIC:TUMORS AT OR APPLICATION. CARCINOGENICITY - RAT - SUBCUTANEOUS TUMORIGENIC:EQUIVOCAL TUMORIGENIC AGENT BY RTECS CRITERIA. TUMORIGENIC:TUMORS AT SITE OR APPLICATION. HUMAN CARCINOGEN. IARC: 1 - GROUP 1: CARCINOGENIC TO HUMANS (LI CHROMATE) 2A - GROUP 2A: PROBABLY CARCINOGENIC T HUMANS (LEAD CHROMATE) IARC: NTP: KNOWN TO BE HUMAN CARCINOGEN (LEAD CHROMATE) REASONABLY ANTICIPATED TO BE A HUMAN CARCINOGENTHE REFERENCE NOTE HAS BE ADDED BY TD BASED ON THE BACKGROUNI   |  | NO DATA AVAILABLE  |
| IRRITATION  RESPIRATORY OR SKIN NO DATA AVAILABLE SENSITISATION  GERM CELL MUTAGENICITY NO DATA AVAILABLE  CARCINOGENICITY CARCINOGENICITY - RAT - INTRAMUSCULAR TUMORIGENIC:NEOPLASTIC BY RTECS CRITERIA. KIDNEY, URETER, BLADDER:KIDNEY TUMORS. TUMORIGENIC:TUMORS AT SITE OR APPLICATIC CARCINOGENICITY - RAT - SUBCUTANEOUS TUMORIGENIC:NEOPLASTIC BY RTECS CRITERIA. TUMORIGENIC:TUMORS AT OR APPLICATION.  CARCINOGENICITY - RAT - SUBCUTANEOUS TUMORIGENIC:EQUIVOCAL TUMORIGENIC AGENT BY RTECS CRITERIA. TUMORIGENIC:TUMORS AT SITE OR APPLICATION.  HUMAN CARCINOGEN. IARC: I - GROUP 1: CARCINOGENIC TO HUMANS (LI CHROMATE) 2A - GROUP 2A: PROBABLY CARCINOGENIC T HUMANS (LEAD CHROMATE) IARC:  NTP: KNOWN TO BE HUMAN CARCINOGEN (LEAD CHROMATE) REASONABLY ANTICIPATED TO BE A HUMAN CARCINOGENTHE REFERENCE NOTE HAS BE ADDED BY TD BASED ON THE BACKGROUNI   |  | NO DATA AVAILABLE  |
| SENSITISATION GERM CELL MUTAGENICITY NO DATA AVAILABLE CARCINOGENICITY CARCINOGENICITY - RAT - INTRAMUSCULAR TUMORIGENIC:NEOPLASTIC BY RTECS CRITERIA. KIDNEY, URETER, BLADDER:KIDNEY TUMORS. TUMORIGENIC:TUMORS AT SITE OR APPLICATIO CARCINOGENICITY - RAT - SUBCUTANEOUS TUMORIGENIC:NEOPLASTIC BY RTECS CRITERIA. TUMORIGENIC:TUMORS AT OR APPLICATION. CARCINOGENICITY - RAT - SUBCUTANEOUS TUMORIGENIC:EQUIVOCAL TUMORIGENIC AGENT BY RTECS CRITERIA. TUMORIGENIC:TUMORS AT SITE OR APPLICATION. HUMAN CARCINOGEN. IARC: 1 - GROUP 1: CARCINOGENIC TO HUMANS (LI CHROMATE) 2A - GROUP 2A: PROBABLY CARCINOGENIC T HUMANS (LEAD CHROMATE) IARC: NTP: KNOWN TO BE HUMAN CARCINOGEN (LEAD CHROMATE) REASONABLY ANTICIPATED TO BE A HUMAN CARCINOGENTHE REFERENCE NOTE HAS BE ADDED BY TD BASED ON THE BACKGROUNT  |  | NO DATA AVAILABLE  |
| CARCINOGENICITY<br>CARCINOGENICITY - RAT - INTRAMUSCULAR<br>TUMORIGENIC:NEOPLASTIC BY RTECS CRITERIA. KIDNEY, URETER,<br>BLADDER:KIDNEY TUMORS. TUMORIGENIC:TUMORS AT SITE OR APPLICATIC<br>CARCINOGENICITY - RAT - SUBCUTANEOUS<br>TUMORIGENIC:NEOPLASTIC BY RTECS CRITERIA. TUMORIGENIC:TUMORS AT<br>OR APPLICATION.<br>CARCINOGENICITY - RAT - SUBCUTANEOUS<br>TUMORIGENIC:EQUIVOCAL TUMORIGENIC AGENT BY RTECS CRITERIA.<br>TUMORIGENIC:TUMORS AT SITE OR APPLICATION.<br>HUMAN CARCINOGEN.<br>IARC: 1 - GROUP 1: CARCINOGENIC TO HUMANS (LI<br>CHROMATE)<br>2A - GROUP 2A: PROBABLY CARCINOGENIC T<br>HUMANS (LEAD CHROMATE) IARC:<br>NTP: KNOWN TO BE HUMAN CARCINOGEN (LEAD<br>CHROMATE)<br>REASONABLY ANTICIPATED TO BE A HUMAN<br>CARCINOGENTHE REFERENCE NOTE HAS BE<br>ADDED BY TD BASED ON THE BACKGROUNI  |  | NO DATA AVAILABLE  |
| CARCINOGENICITY - RAT - INTRAMUSCULAR<br>TUMORIGENIC:NEOPLASTIC BY RTECS CRITERIA. KIDNEY, URETER,<br>BLADDER:KIDNEY TUMORS. TUMORIGENIC:TUMORS AT SITE OR APPLICATIO<br>CARCINOGENICITY - RAT - SUBCUTANEOUS<br>TUMORIGENIC:NEOPLASTIC BY RTECS CRITERIA. TUMORIGENIC:TUMORS AT<br>OR APPLICATION.<br>CARCINOGENICITY - RAT - SUBCUTANEOUS<br>TUMORIGENIC:EQUIVOCAL TUMORIGENIC AGENT BY RTECS CRITERIA.<br>TUMORIGENIC:TUMORS AT SITE OR APPLICATION.<br>HUMAN CARCINOGEN.<br>IARC: 1 - GROUP 1: CARCINOGENIC TO HUMANS (LI<br>CHROMATE)<br>2A - GROUP 2A: PROBABLY CARCINOGENIC T<br>HUMANS (LEAD CHROMATE) IARC:<br>NTP: KNOWN TO BE HUMAN CARCINOGEN (LEAD<br>CHROMATE)<br>REASONABLY ANTICIPATED TO BE A HUMAN<br>CARCINOGENTHE REFERENCE NOTE HAS BE<br>ADDED BY TD BASED ON THE BACKGROUNI   | GERM CELL MUTAGENICITY                                 | NO DATA AVAILABLE  |
| TUMORIGENIC:NEOPLASTIC BY RTECS CRITERIA. TUMORIGENIC:TUMORS AT<br>OR APPLICATION.<br>CARCINOGENICITY - RAT - SUBCUTANEOUS<br>TUMORIGENIC:EQUIVOCAL TUMORIGENIC AGENT BY RTECS CRITERIA.<br>TUMORIGENIC:TUMORS AT SITE OR APPLICATION.<br>HUMAN CARCINOGEN.<br>IARC: 1 - GROUP 1: CARCINOGENIC TO HUMANS (LI<br>CHROMATE)<br>2A - GROUP 2A: PROBABLY CARCINOGENIC T<br>HUMANS (LEAD CHROMATE) IARC:<br>NTP: KNOWN TO BE HUMAN CARCINOGEN (LEAD<br>CHROMATE)<br>REASONABLY ANTICIPATED TO BE A HUMAN<br>CARCINOGENTHE REFERENCE NOTE HAS BE<br>ADDED BY TD BASED ON THE BACKGROUNI  | CARCINOGENICITY - RAT - IN<br>TUMORIGENIC:NEOPLASTIC E | BY RTECS CRITERIA. KIDNEY, URETER,   |
| TUMORIGENIC:EQUIVOCAL TUMORIGENIC AGENT BY RTECS CRITERIA.<br>TUMORIGENIC:TUMORS AT SITE OR APPLICATION.<br>HUMAN CARCINOGEN.<br>IARC: 1 - GROUP 1: CARCINOGENIC TO HUMANS (LI<br>CHROMATE)<br>2A - GROUP 2A: PROBABLY CARCINOGENIC T<br>HUMANS (LEAD CHROMATE) IARC:<br>NTP: KNOWN TO BE HUMAN CARCINOGEN (LEAD<br>CHROMATE)<br>REASONABLY ANTICIPATED TO BE A HUMAN<br>CARCINOGENTHE REFERENCE NOTE HAS BE<br>ADDED BY TD BASED ON THE BACKGROUNI  | TUMORIGENIC:NEOPLASTIC E                               |  |
| IARC:1 - GROUP 1: CARCINOGENIC TO HUMANS (LI<br>CHROMATE)<br>2A - GROUP 2A: PROBABLY CARCINOGENIC T<br>HUMANS (LEAD CHROMATE) IARC:NTP:KNOWN TO BE HUMAN CARCINOGEN (LEAD<br>CHROMATE)<br>REASONABLY ANTICIPATED TO BE A HUMAN<br>CARCINOGENTHE REFERENCE NOTE HAS BE<br>ADDED BY TD BASED ON THE BACKGROUNI   | TUMORIGENIC:EQUIVOCAL T                                | UMORIGENIC AGENT BY RTECS CRITERIA.  |
| CHROMATE)<br>REASONABLY ANTICIPATED TO BE A HUMAN<br>CARCINOGENTHE REFERENCE NOTE HAS BE<br>ADDED BY TD BASED ON THE BACKGROUNI  |  | 2A - GROUP 2A: PROBABLY CARCINOGENIC TO  |
|  | NTP:   | KNOWN TO BE HUMAN CARCINOGEN (LEAD<br>CHROMATE)<br>REASONABLY ANTICIPATED TO BE A HUMAN<br>CARCINOGENTHE REFERENCE NOTE HAS BEEN<br>ADDED BY TD BASED ON THE BACKGROUND<br>INFORMATION OF THE NTP. (LEAD CHROMATE) |

OSHA: OSHA SPECIFICALLY REGULATED CARCINOGEN (LEAD CHROMATE)

REPRODUCTIVE TOXICITY KNOWN HUMAN REPRODUCTIVE TOXICANT

SPECIFIC TARGET ORGAN NO DATA AVAILABLE TOXICITY - SINGLE EXPOSURE

SPECIFIC TARGET ORGANMAY CAUSE DAMAGE TO ORGANS THROUGHTOXICITY - REPEATEDPROLONGED OR REPEATED EXPOSURE.EXPOSUREEXPOSURE

ASPIRATION HAZARD NO DATA AVAILABLE

ADDITIONAL INFORMATION RTECS: GB2975000

LEAD SALTS HAVE BEEN REPORTED TO CROSS THE PLACENTA AND TO INDUCE EMBRYO- AND FETO-MORTALITY. THEY ALSO HAVE TERATOGENIC EFFECT IN SOME ANIMAL SPECIES. NO TERATOGENIC EFFECTS HAVE BEEN REPORTED WITH EXPOSURE TO ORGANOMETALLIC LEAD COMPOUNDS. ADVERSE EFFECTS OF LEAD ON HUMAN REPRODUCTION, EMBRYONIC AND FETAL DEVELOPMENT, AND POSTNATAL (E.G., MENTAL) DEVELOPMENT HAVE BEEN REPORTED. EXCESSIVE EXPOSURE CAN AFFECT BLOOD, NERVOUS, AND DIGESTIVE SYSTEMS. THE SYNTHESIS OF HEMOGLOBIN IS INHIBITED AND RESULTS IN ANEMIA. IF LEFT UNTREATED, NEUROMUSCULAR DYSFUNCTION, POSSIBLE PARALYSIS, AND ENCEPHALOPATHY CAN RESULT. ADDITIONAL SYMPTOMS OF OVEREXPOSURE INCLUDE: JOINT AND MUSCLE PAIN, WEAKNESS OF THE EXTENSOR MUSCLES (FREQUENTLY THE HAND AND WRIST), HEADACHE, DIZZINESS, ABDOMINAL PAIN, DIARRHEA, CONSTIPATION, NAUSEA, VOMITING, BLUE LINE ON THE GUMS, INSOMNIA, AND METALLIC TASTE. HIGH BODY LEVELS PRODUCE INCREASED CEREBROSPINAL PRESSURE, BRAIN DAMAGE, AND STUPOR LEADING TO COMA AND OFTEN DEATH. TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED. STOMACH - IRREGULARITIES - BASED ON HUMAN

EVIDENCE

#### SECTION 12. ECOLOGICAL INFORMATION

| TOXICITY                              | NO DATA AVAILABLE  |
|---------------------------------------|--|
| PERSISTENCE AND<br>DEGRADABILITY      | NO DATA AVAILABLE  |
| BIOACCUMULATIVE<br>POTENTIAL          | NO DATA AVAILABLE  |
| MOBILITY IN SOIL                      | NO DATA AVAILABLE  |
| RESULTS OF PBT AND VPVB<br>ASSESSMENT | PBT/VPVB ASSESSMENT NOT AVAILABLE AS<br>CHEMICAL SAFETY ASSESSMENT NOT<br>REQUIRED/NOT CONDUCTED                                     |
| OTHER ADVERSE EFFECTS                 | VERY TOXIC TO AQUATIC LIFE.<br>AN ENVIRONMENTAL HAZARD CANNOT BE<br>EXCLUDED IN THE EVENT OF UNPROFESSIONAL<br>HANDLING OR DISPOSAL. |

#### SECTION 13. DISPOSAL CONSIDERATIONS

#### WASTE TREATMENT METHODS

| PRODUCT | OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS<br>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)              |                                      |
|-----------------------|--------------------------------------|
| NOT DANGEROUS GOODS   |                                      |
| IMDG                  |                                      |
| PROPER SHIPPING NAME: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, |
|                       | SOLID, N.O.S. (Lead(II) chromate)    |
| UN NUMBER:            | 3077                                 |
| CLASS:                | 9                                    |
| PACKING GROUP:        | III                                  |
| EMS-NO:               | F-A, S-F                             |
| MARINE POLLUTANT:     | YES                                  |
|                       |                                      |

| IATA                  |                                      |
|-----------------------|--------------------------------------|
| PROPER SHIPPING NAME: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, |
|                       | SOLID, N.O.S. (Lead(II) chromate)    |
| UN NUMBER:            | 3077                                 |
| CLASS:                | 9                                    |
| PACKING GROUP:        | III                                  |

FURTHER INFORMATION

EHS-MARK REQUIRED (ADR 2.2.9.1.10, IMDG CODE 2.10.3) FOR SINGLE PACKAGINGS AND COMBINATION PACKAGINGS CONTAINING INNER PACKAGINGS WITH DANGEROUS GOODS > 5L FOR LIQUIDS OR > 5KG FOR SOLIDS.

#### SECTION 15. REGULATORY INFORMATION

| SARA 302 COMPONENTS                      | NO CHEMICALS IN THIS MA<br>THE REPORTING REQUIREM<br>SECTION 302. |                            |
|--|---|----------------------------|
| SARA 313 COMPONENTS                      | THE FOLLOWING COMPON<br>REPORTING LEVELS ESTAE<br>SECTION 313:    |                            |
| Lead(II) chromate                        | CAS #<br>7758-97-6  | REVISION DATE<br>4/24/1993 |
| MASSACHUSETTS RIGHT TO                   | ) KNOW COMPONENTS   |                            |
|  | CAS #   | REVISION DATE              |
| Lead(II) chromate                        | 7758-97-6   | 4/24/1993                  |
| PENNSYLVANIA RIGHT TO<br>KNOW COMPONENTS |   |                            |
| Lead(II) chromate                        | CAS # REVISION DATE<br>7758-97-6                                  | REVISION DATE<br>4/24/1993 |
| NEW JERSEY RIGHT TO<br>KNOW COMPONENTS   |   |                            |
|  | CAS#  | REVISION DATE              |
| Lead(II) chromate                        | 7758-97-6   | 4/24/1993                  |
| CALIFORNIA PROP. 65<br>COMPONENTS        | WARNING! THIS PRODUCT<br>KNOWN TO THE STATE OF C<br>CANCER.       |                            |
|  | CAS #   | REVISION DATE              |
| Lead(II) chromate                        | 7758-97-6   | 6/6/2014                   |
|  |   |                            |

#### SECTION 16. OTHER INFORMATION

| FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3. |                          |  |  |
|---|--------------------------|--|--|
| AQUATIC ACUTE   | ACUTE AQUATIC TOXICITY   |  |  |
| AQUATIC CHRONIC   | CHRONIC AQUATIC TOXICITY |  |  |
| CARC.   | CARCINOGENICITY          |  |  |

| H350<br>H360       | MAY CAUSE CANCER.<br>MAY DAMAGE FERTILITY OR THE UNBORN CHILD.        |
|--------------------|---|
| H373               | MAY CAUSE DAMAGE TO ORGANS THROUGH<br>PROLONGED OR REPEATED EXPOSURE. |
| H400               | VERY TOXIC TO AQUATIC LIFE.   |
| H411               | TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.                      |
| REPR.              | REPRODUCTIVE TOXICITY   |
| HMIS RATING        |   |
| HEALTH HAZARD:     | 0   |
| CHRONIC HEALTH     | *   |
| HAZARD:            |   |
| FLAMMABILITY:      | 0   |
| PHYSICAL HAZARD    | 0   |
| NFPA RATING        |   |
| HEALTH HAZARD:     | 0   |
| FIRE HAZARD:       | 0   |
| REACTIVITY HAZARD: | 0   |

| 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:**

THE INFORMATION ABOVE IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. HOWEVER, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO SUCH INFORMATION, AND WE ASSUME NO LIABILITY RESULTING FROM ITS USE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION FOR THEIR PARTICULAR PURPOSES. IN NO EVENT SHALL **CII** BE LIABLE FOR ANY CLAIMS, LOSSES, OR DAMAGES OF ANY THIRD PARTY OR FOR LOST PROFITS OR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES, HOWSOEVER ARISING, EVEN IF **CII** HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.