Chem-Impex International Inc.

Tel: (630) 766-2112
E-mail: sales@chemimpex.com
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 #: 30302

NAME: Lead(II) fluoride

SYNONYMS:

24 HOUR EMERGENCY

TELEPHONE:

(800) 535-5053(USA)

352-323-3500 (INTERNATIONAL)

TO REQUEST AN MSDS: (800) 869-9290

CUSTOMER 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 2), H300 ACUTE TOXICITY, INHALATION (CATEGORY 2), H330 ACUTE TOXICITY, DERMAL (CATEGORY 1), H310 CARCINOGENICITY (CATEGORY 1B), 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 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 DANGER

HAZARD STATEMENT(S)

H300 + H310 + H330 FATAL IF SWALLOWED, IN CONTACT WITH SKIN OR IF

INHALED

H350 MAY CAUSE CANCER.

H360 MAY DAMAGE FERTILITY OR THE UNBORN CHILD.

H373 MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED

OR REPEATED EXPOSURE.

H410 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.

P260 DO NOT BREATHE DUST/ FUME/ GAS/ MIST/ VAPOURS/

SPRAY.

P262 DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING.
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.

P284 WEAR RESPIRATORY PROTECTION.

P301 + P310 + P330 IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER OR

DOCTOR/ PHYSICIAN. RINSE MOUTH.

P302 + P350 + P310 IF ON SKIN: GENTLY WASH WITH PLENTY OF SOAP AND

WATER. IMMEDIATELY CALL A POISON CENTER OR

DOCTOR/PHYSICIAN.

P304 + P340 + P310 IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP

COMFORTABLE FOR BREATHING. IMMEDIATELY CALL A

POISON CENTER OR DOCTOR/PHYSICIAN.

P308 + P313 IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/

ATTENTION.

P362 TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE

REUSE.

P391 COLLECT SPILLAGE.

P403 + P233 STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER

TIGHTLY CLOSED.

P405 STORE LOCKED UP.

P501 DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED

WASTE DISPOSAL PLANT.

HAZARDS NOT OTHERWISE

NONE

CLASSIFIED (HNOC) OR NOT COVERED

BY GHS

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

 PbF_2 MF:

MW: 245.2

CAS-NO. 7783-46-2

PURITY: \geq 99% (Metals basis)

HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
LEAD DIFLUORIDE		•
	ACUTE TOX. 2; ACUTE TOX. 1;	<= 100%
	CARC. 1B; REPR. 1A; STOT RE	
	2; AQUATIC ACUTE 1;	
	AQUATIC CHRONIC 1; H300 +	
	H310 + H330, H350, H360, H373,	
	H410	

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

CONTACT

WASH OFF WITH SOAP AND PLENTY OF WATER. TAKE

VICTIM IMMEDIATELY TO HOSPITAL. CONSULT A

PHYSICIAN.

IN CASE OF EYE CONTACT

FLUSH EYES WITH WATER AS A PRECAUTION.

IF SWALLOWED

AND DELAYED

NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER.

CONSULT A PHYSICIAN.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE

SECTION 2.2) AND/OR IN SECTION 11

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED NO DATA AVAILABLE

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

SUITABLE USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY

EXTINGUISHING MEDIA CHEMICAL OR CARBON DIOXIDE.

SPECIAL HAZARDS HYDROGEN FLUORIDE, LEAD OXIDES

ARISING FROM THE

PROCEDURES

SUBSTANCE OR MIXTURE

ADVICE FOR WEAR SELF-CONTAINED BREATHING APPARATUS FOR

FIREFIGHTERS FIREFIGHTING IF NECESSARY.

FURTHER INFORMATION NO DATA AVAILABLE

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL WEAR RESPIRATORY PROTECTION. AVOID DUST PRECAUTIONS, FORMATION. AVOID BREATHING VAPOURS, MIST OR PROTECTIVE GAS. ENSURE ADEQUATE VENTILATION. EVACUATE EQUIPMENT AND 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 MATERIALS FOR CONTAINMENT AND CLEANING UP

PICK UP AND ARRANGE DISPOSAL WITHOUT CREATING DUST. SWEEP UP AND SHOVEL. KEEP IN SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.

REFERENCE TO OTHER **SECTIONS**

FOR DISPOSAL SEE SECTION 13.

SECTION 7. HANDLING AND STORAGE

HANDLING

PRECAUTIONS FOR SAFE AVOID CONTACT WITH SKIN AND EYES. AVOID 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 STORAGE, INCLUDING ANY INCOMPATIBILITIES KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND

WELL-VENTILATED PLACE.

KEEP IN A DRY PLACE.

STORAGE CLASS (TRGS 510): NON-COMBUSTIBLE, ACUTE TOXIC CAT.3 / TOXIC HAZARDOUS MATERIALS OR HAZARDOUS MATERIALS CAUSING CHRONIC

EFFECTS

SPECIFIC END USE(S)

APART FROM THE USES MENTIONED IN SECTION 1.2

NO OTHER SPECIFIC USES ARE STIPULATED

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

COMPONENT	CAS-NO.	VALUE	CONTROL	BASIS
			PARAMETERS	
LEAD	7783-46-2	TWA	0.05 MG/M3	USA. ACGIH THRESHOLD
DIFLUORIDE				LIMIT VALUES
				(TLV)

REMARKS	CENTRAL NERVOUS SYSTEM IMPAIRMENT			
KEWAKS	HEMATOLOGIC EFFECTS			
	PERIPHERAL NERVOUS SYSTEM IMPAIRMENT			
	SUBSTANCES FOR WHICH THERE IS A BIOLOGICAL			
	EXPOSURE INDEX OR INDICES			
	(SEE BEI SECTION)			
	CONFIRMED ANIMAL CARCINOGEN WITH UNKNOWN			
	RELEVANCE TO HUMANS			
	VARIES			
	TWA	0.050000 MG/M3	USA. ACGIH THRESHOLD	
			LIMIT VALUES	
			(TLV)	
	CENTRAL NE	ERVOUS SYSTEM	IMPAIRMENT	
	HEMATOLOGIC EFFECTS PERIPHERAL NERVOUS SYSTEM IMPAIRMENT SUBSTANCES FOR WHICH THERE IS A BIOLOGICAL EXPOSURE INDEX OR INDICES (SEE BEI SECTION)			
	CONFIRMED ANIMAL CARCINOGEN WITH UNKNOWN			
	RELEVANCE TO HUMANS VARIES			
	TWA	2.500000 MG/M3	USA. OCCUPATIONAL	
			EXPOSURE LIMITS	
			(OSHA) - TABLE Z-1 LIMITS	
			FOR AIR	
			CONTAMINANTS	
	CAS NUMBE	R VARIES WITH (
	TWA		USA. OCCUPATIONAL	
	1 WA	2.300000 WIG/WIS	EXPOSURE LIMITS	
			(OSHA) - TABLE Z-2	
	Z37.28-1969	1	(OBIIA) - IADLE L-2	
		2 500000 140/142	USA. ACGIH THRESHOLD	
	TWA	2.500000 MG/M3		
			LIMIT VALUES	
	DOMES IN THE	G.F.	(TLV)	
	BONE DAMA	.GE		
	FLUOROSIS		TEDE IG A DIOL C STS T	
	SUBSTANCES FOR WHICH THERE IS A BIOLOGICAL			
		NDEX OR INDICE	ES	
	(SEE BEI SECTION) NOT CLASSIFIABLE AS A HUMAN CARCINOGEN			
	VARIES			
	TWA	0.050000 MG/M3		
			RECOMMENDED	
			EXPOSURE LIMITS	
	SEE APPEND	IX C		
	TWA		USA. ACGIH THRESHOLD	
		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	LIMIT VALUES	
			(TLV)	
L	1	1	(,)	

	BONE DAMAGE		
FLUOROSIS	FLUOROSIS		
SUBSTANCE	SUBSTANCES FOR WHICH THERE IS A BIOLOGICAL		
EXPOSURE INDEX OR INDICES			
(SEE BEI SE	(SEE BEI SECTION)		
NOT CLASSIFIABLE AS A HUMAN CARCINOGEN			
VARIES			
PEL	0.050000 MG/M3 OSHA SPECIFICALLY		
	REGULATED		
	CHEMICALS/CARCINOGENS		
1910.1025			
IF AN EMPL	IF AN EMPLOYEE IS EXPOSED TO LEAD FOR MORE THAN		
8 HOURS IN	8 HOURS IN ANY WORK DAY, THE PERMISSIBLE		
EXPOSURE	EXPOSURE LIMIT, AS A TIME WEIGHTED AVERAGE (TWA)		
FOR THAT DAY, SHALL BE REDUCED ACCORDING TO THE			
FOLLOWING FORMULA: MAXIMUM PERMISSIBLE LIMIT			
(IN MG/M3)=400 HOURS WORKED IN THE DAY.			
THIS SECTION APPLIES TO ALL OCCUPATIONAL			
EXPOSURE 7	EXPOSURE TO LEAD, EXCEPT AS PROVIDED IN		
PARAGRAPH (A)(2). IT DOES NOT APPLY TO THE			
	ΓΙΟΝ INDUSTRY OR TO AGRICULTURAL		
	S COVERED BY 29 CFR PART 1928. OSHA		
	SPECIFICALLY REGULATED CARCINOGEN		

BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS

COMPONENT	CAS-NO.	PARAMETERS	VALUE	BIOLOGICAL	BASIS
				SPECIMEN	
LEAD	7783-46-2	FLUORIDE	3.0000	IN URINE	ACGIH -
DIFLUORIDE			MG/G		BIOLOGICAL
					EXPOSURE
					INDICES
					(BEI)
	REMARKS	PRIOR TO SHIFT (16 HOURS AFTER EXPOSURE CEASES)			
		FLUORIDE	10.0000	IN URINE	ACGIH -
			MG/G		BIOLOGICAL
					EXPOSURE
					INDICES
					(BEI)
		END OF SHIFT (AS SOON AS POSSIBLE AFTER EXPOSURE			
		CEASES)			
		FLUORIDE	2 MG/L	URINE	ACGIH -
					BIOLOGICAL
					EXPOSURE
					INDICES
					(BEI)
		PRIOR TO SHIFT (16 HOURS AFTER EXPOSURE CEASES)			
		FLUORIDE	3 MG/L	URINE	ACGIH -
					BIOLOGICAL
					EXPOSURE
					INDICES
					(BEI)
		END OF SHIFT (AS SOON AS POSSIBLE AFTER EXPOSURE			
		CEASES)			

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 EOUIPMENT 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

TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE

(WITHOUT TOUCHING GLOVE"S OUTER SURFACE) TO AVOID

SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF

CONTAMINATED GLOVES AFTER USE IN ACCORDANCE WITH APPLICABLE LAWS AND GOOD LABORATORY PRACTICES.

WASH AND DRY HANDS.

FULL CONTACT

MATERIAL: NITRILE RUBBER

MINIMUM LAYER THICKNESS: 0.11 MM

BREAK THROUGH TIME: 480 MIN

MATERIAL TESTED: DERMATRIL (KCL 740, SIZE M)

SPLASH CONTACT

MATERIAL: NITRILE RUBBER

MINIMUM LAYER THICKNESS: 0.11 MM

BREAK THROUGH TIME: 480 MIN

MATERIAL TESTED: DERMATRIL (KCL 740, SIZE M)

IF USED IN SOLUTION, OR MIXED WITH OTHER SUBSTANCES.

AND UNDER CONDITIONS WHICH DIFFER FROM EN 374.

CONTACT THE SUPPLIER OF THE CE APPROVED GLOVES. THIS RECOMMENDATION IS ADVISORY ONLY AND MUST BE EVALUATED BY AN INDUSTRIAL HYGIENIST AND SAFETY OFFICER FAMILIAR WITH THE SPECIFIC SITUATION OF ANTICIPATED USE BY OUR CUSTOMERS, IT SHOULD NOT BE

CONSTRUED AS OFFERING AN APPROVAL FOR ANY SPECIFIC

USE SCENARIO.

BODY PROTECTION COMPLETE SUIT PROTECTING AGAINST CHEMICALS, THE

TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.

RESPIRATORY WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING

PROTECTION

RESPIRATORS ARE APPROPRIATE USE A FULL-FACE PARTICLE
RESPIRATOR TYPE N100 (US) OR TYPE P3 (EN 143) RESPIRATOR
CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF
THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION. USE A

CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR. USE RESPIRATORS

AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH

(US) OR CEN (EU).

CONTROL OF ENVIRONMENTAL EXPOSURE PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO

THE ENVIRONMENT MUST BE AVOIDED.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE White powder

ODOUR NO DATA AVAILABLE
ODOUR THRESHOLD NO DATA AVAILABLE
PH NO DATA AVAILABLE

MELTING 855 °C

POINT/FREEZING POINT

INITIAL BOILING POINT 1290 °C

AND BOILING RANGE

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 8.445

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 INFORMATION

NO DATA AVAILABLE

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY NO DATA AVAILABLE

CHEMICAL STABILITY STABLE UNDER RECOMMENDED STORAGE

CONDITIONS.

POSSIBILITY OF HAZARDOUS REACTIONS

NO DATA AVAILABLE

CONDITIONS TO AVOID NO DATA AVAILABLE

INCOMPATIBLE ACIDS, BORANE/BORON OXIDES, ALKALI METALS, FLUORINE, CARBIDES, REACTS VIOLENTLY WITH:, **MATERIALS**

POTASSIUM

HAZARDOUS OTHER DECOMPOSITION PRODUCTS - NO DATA

DECOMPOSITION AVAILABLE

PRODUCTS IN THE EVENT OF FIRE: SEE SECTION 5

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY LD50 ORAL - RAT - 3,031 MG/KG

> REMARKS: BEHAVIORAL:MUSCLE WEAKNESS. LUNGS, THORAX, OR RESPIRATION: RESPIRATORY STIMULATION. SKIN AND APPENDAGES: OTHER:

HAIR.

SKIN NO DATA AVAILABLE

CORROSION/IRRITATION

SERIOUS EYE NO DATA AVAILABLE

DAMAGE/EYE IRRITATION

RESPIRATORY OR SKIN NO DATA AVAILABLE

SENSITISATION

GERM CELL NO DATA AVAILABLE

MUTAGENICITY

CARCINOGENICITY

IARC: 2A - GROUP 2A: PROBABLY CARCINOGENIC TO

HUMANS (LEAD DIFLUORIDE)

3 - GROUP 3: NOT CLASSIFIABLE AS TO ITS

CARCINOGENICITY TO HUMANS (LEAD DIFLUORIDE)

NTP: REASONABLY ANTICIPATED TO BE A HUMAN

CARCINOGENTHE REFERENCE NOTE HAS BEEN ADDED BY TD BASED ON THE BACKGROUND INFORMATION OF THE NTP. (LEAD DIFLUORIDE)

OSHA: OSHA SPECIFICALLY REGULATED CARCINOGEN

(LEAD DIFLUORIDE)

REPRODUCTIVE TOXICITY REPRODUCTIVE TOXICITY - RAT - INHALATION

PATERNAL EFFECTS: SPERMATOGENESIS (INCLUDING

GENETIC MATERIAL, SPERM

MORPHOLOGY, MOTILITY, AND COUNT). EFFECTS ON EMBRYO OR FETUS: FETOTOXICITY (EXCEPT DEATH,

E.G., STUNTED FETUS).

REPRODUCTIVE TOXICITY - RAT - INHALATION EFFECTS ON FERTILITY: POST-IMPLANTATION MORTALITY (E.G., DEAD AND/OR RESORBED IMPLANTS PER TOTAL NUMBER OF IMPLANTS). EFFECTS ON EMBRYO OR FETUS: FETAL DEATH. KNOWN HUMAN REPRODUCTIVE TOXICANT

SPECIFIC TARGET ORGAN

TOXICITY - SINGLE

EXPOSURE

NO DATA AVAILABLE

SPECIFIC TARGET ORGAN TOXICITY - REPEATED

EXPOSURE

MAY CAUSE DAMAGE TO ORGANS THROUGH

PROLONGED OR REPEATED EXPOSURE.

ASPIRATION HAZARD NO DATA AVAILABLE

ADDITIONAL INFORMATION

RTECS: OG1225000

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.,

KIDNEY INJURY MAY OCCUR.

 ${\tt STOMACH-IRREGULARITIES-BASED\ ON\ HUMAN}$

EVIDENCE

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY NO DATA AVAILABLE

PERSISTENCE AND DEGRADABILITY

BIODEGRADABILITY RESULT: - NOT READILY BIODEGRADABLE.

BIOACCUMULATIVE

POTENTIAL

NO DATA AVAILABLE

MOBILITY IN SOIL NO DATA AVAILABLE

RESULTS OF PBT AND

VPVB ASSESSMENT

PBT/VPVB ASSESSMENT NOT AVAILABLE AS

CHEMICAL SAFETY ASSESSMENT NOT

REQUIRED/NOT CONDUCTED

OTHER ADVERSE EFFECTS AN ENVIRONMENTAL HAZARD CANNOT BE

EXCLUDED IN THE EVENT OF UNPROFESSIONAL

HANDLING OR DISPOSAL.

VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING

EFFECTS.

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 PACKAGING

DISPOSE OF AS UNUSED PRODUCT.

SECTION 14. TRANSPORT INFORMATION

DOT (US)

PROPER SHIPPING NAME: LEAD COMPOUNDS, SOLUBLE, N.O.S.(Lead(II) fluoride)

UN NUMBER: 2291
CLASS: 6.1
PACKING GROUP: III
REPORTABLE QUANTITY 10 LBS

(RQ):

POISON INHALATION NO

HAZARD:

IMDG

PROPER SHIPPING NAME: LEAD COMPOUND, SOLUBLE, N.O.S.(Lead(II) fluoride)

UN NUMBER: 2291
CLASS: 6.1
PACKING GROUP: III
EMS-NO: F-A, S-A
MARINE POLLUTANT: YES

IATA

PROPER SHIPPING NAME: LEAD COMPOUND, SOLUBLE, N.O.S.(Lead(II) fluoride)

UN NUMBER: 2291 CLASS: 6.1 PACKING GROUP: III

SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO

THE REPORTING REQUIREMENTS OF SARA TITLE III,

SECTION 302.

SARA 313 COMPONENTS THIS MATERIAL DOES NOT CONTAIN ANY CHEMICAL

> COMPONENTS WITH KNOWN CAS NUMBERS THAT EXCEED THE THRESHOLD (DEMINIMIS) REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313.

SARA 311/312 HAZARDS ACUTE HEALTH HAZARD, CHRONIC HEALTH HAZARD

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

CAS-NO. **REVISION DATE**

Lead(II) fluoride 7783-46-2 4/24/1993

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

CAS-NO. **REVISION DATE**

Lead(II) fluoride 4/24/1993 7783-46-2

NEW JERSEY RIGHT TO KNOW COMPONENTS

CAS-NO. **REVISION DATE**

7783-46-2 4/24/1993 Lead(II) fluoride

CALIFORNIA PROP. 65

WARNING! THIS PRODUCT CONTAINS A CHEMICAL **COMPONENTS**

KNOWN TO THE STATE OF CALIFORNIA TO CAUSE

CANCER.

CAS-REVISION DATE

NO.

Lead(II) fluoride 7783-46-2 9/28/2007

SECTION 16. OTHER INFORMATION

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

ACUTE TOX. **ACUTE TOXICITY**

AQUATIC ACUTE ACUTE AQUATIC TOXICITY AQUATIC CHRONIC CHRONIC AQUATIC TOXICITY

CARC. **CARCINOGENICITY** H300 FATAL IF SWALLOWED.

H300 + H310 + H330FATAL IF SWALLOWED, IN CONTACT WITH SKIN OR IF

INHALED

H310 FATAL IN CONTACT WITH SKIN.

H330 FATAL IF INHALED. H350 MAY CAUSE CANCER.

H360 MAY DAMAGE FERTILITY OR THE UNBORN CHILD.

HMIS RATING

HEALTH HAZARD: 4 CHRONIC HEALTH *

HAZARD:

FLAMMABILITY: 0 PHYSICAL HAZARD 0

NFPA RATING

HEALTH HAZARD: 4
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.