



# SAFETY DATA SHEET

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## SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Lead (II) Fluoride**  
PRODUCT NUMBER: 2236  
CAS NUMBER: 7783-46-2  
SYNONYMS: Lead difluoride, Plumbous fluoride

### MANUFACTURER:

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## SECTION 2 HAZARDS IDENTIFICATION

### CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram



Signal Word

**Danger**

### Hazard Statements

302+H332	Harmful if swallowed or if inhaled.
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 Phrases

P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust or mist.
P261	Avoid breathing dust/fume/gas/mist/vapors/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 into the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

## SECTION 2 HAZARDS IDENTIFICATION (Cont.)

P361	Remove/take off immediately all contaminated clothing
P363	Wash contaminated clothing before reuse
P403+P233	Store in a well-ventilated place. Keep container tightly closed

### HMIS CLASSIFICATION:

Health: 2      Chronic: \*      Fire: 0      Reactivity Hazard: 0

### NFPA RATING:

Health: 2      Flammability: 0      Reactivity Hazard: 0

**EYE CONTACT:** The dust may cause slight to mild irritation of the eyes.

**SKIN CONTACT:** The dust may cause slight to mild irritation of the skin.

**INHALATION:** Harmful by inhalation. Large dust exposure may cause seizures, coma, and cardio respiratory arrest.

**INGESTION:** Harmful if swallowed. Ingestion of dust may lead to dizziness, abdominal cramps, vomiting, bloody diarrhea, weakness, and convulsions.

**CHRONIC HEALTH EFFECTS:** Possible risk of impaired fertility. May cause cancer. The chronic effects include diarrhea, loss of appetite, insomnia, weakness, muscle pain, headache, dizziness, and anemia. The subject of chronic lead poisoning can not be adequately addressed in this document.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula:  $PbF_2$

Molecular Weight: 245.20

CHEMICAL NAME	CAS#	%
Lead (II) Fluoride	7783-46-2	100

## SECTION 4 FIRST AID MEASURES

**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

**SKIN EXPOSURE:** Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

**INHALATION:** Remove to fresh air and keep at rest. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases, seek immediate medical assistance.

**INGESTION:** Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

## SECTION 5 FIREFIGHTING MEASURES

**FLASH POINT:** Product is not flammable

**AUTO IGNITION TEMPERATURE:** Not available

**EXPLOSION LIMITS:** Not available

**EXTINGUISHING MEDIUM:** Use fire fighting measures that suit the surrounding fire.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** Hydrogen fluoride and lead oxides

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Wear all appropriate equipment when using this material. Ensure adequate ventilation. Avoid dust formation. Avoid breathing dust.

**ENVIRONMENTAL PRECAUTIONS:** Prevent spillage from entering drains or allowing to be released into the environment.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Sweep up and place in suitable container for proper disposal.

## SECTION 7 HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Wear appropriate personal protective equipment. Ensure adequate ventilation. Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

**CONDITIONS FOR SAFE STORAGE:** Store in cool, dry, and well-ventilated area. Do not store with acids. Store away from alkali metals.

## SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

### EXPOSURE CONTROLS:

Component	Exposure Limits	Basis	Entity	
Lead difluoride	0.05 mg/m <sup>3*</sup>	2.5mg/m <sup>3**</sup>	TLV	ACGIH
	0.05 mg/m <sup>3*</sup>	2.5mg/m <sup>3**</sup>	PEL	OSHA
	0.05 mg/m <sup>3*</sup>	2.5mg/m <sup>3**</sup>	REL	NIOSH
(Fluoride Prior to shift)	3mg/g		BEI-U	ACGIH
(Fluoride after shift)	10mg/g		BEI-U	ACGIH

\*As Lead

\*\*As Fluoride

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

BEI-U: Biological Exposure Indices in Urine

**EYE PROTECTION:** Wear chemical safety glasses or goggles and face shield.

**SKIN PROTECTION:** Wear nitrile or rubber gloves, and a complete suit protecting against chemicals

**VENTILATION:** Provide local exhaust, preferably mechanical.

**RESPIRATOR:** Use an approved respirator.

**ADDITIONAL PROTECTION:** Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**COLOR AND FORM:** White solid

**ODOR:** None

**MOLECULAR WEIGHT:** 245.2

**BOILING POINT:** 1290° C

**MELTING POINT:** 855° C

**SPECIFIC GRAVITY:** 8.445 gm/ml

**VAPOR DENSITY:** No data available

**SOLUBILITY:** Soluble

## SECTION 10 STABILITY AND REACTIVITY

**STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:** Will not occur

**CONDITIONS TO AVOID:** No data available

**INCOMPATIBILITY:** Acids, alkali metals, boron oxides, fluorine, and carbides. Reacts violently with: Potassium.

**DECOMPOSITION PRODUCTS:** Lead oxides and hydrogen fluoride

## SECTION 11 TOXICOLOGICAL DATA

**ACUTE TOXICITY:** LD50 Oral – rat – 3031mg/kg. LD50 Oral – rat – 3015mg/kg. LDLo Subcutaneous – frog – 2800mg/kg. TCLo Inhalation – rat – 5mg/m<sup>3</sup>/4H.

**CARCINOGENIC EFFECTS:** Possibly carcinogenic to humans

**MUTAGENIC EFFECTS:** Not available

**TETRATOGENIC EFFECTS:** Not available

**CHRONIC TOXICITY:** Not available

**RTECS:** OG1225000

## SECTION 11 TOXICOLOGICAL DATA (Cont.)

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 system. 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 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 level product increased cerebrospinal pressure, brain damage, and stupor leading to coma and often death. May cause convulsions

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

## SECTION 12 ECOLOGICAL DATA

Poisonous for fish and plankton in water bodies. May cause long lasting harmful effects to aquatic life. Avoid transfer into the environment. Very toxic for aquatic organisms.

## SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.

## SECTION 14 TRANSPORTATION DATA

<b>DOT:</b> UN2291	<b>IATA:</b> UN2291
Lead compounds, soluble, n.o.s. (Lead (II) fluoride)	Lead compound, soluble, n.o.s. (Lead (II) fluoride)
CLASS 6.1	CLASS 6.1
PG III	PG III

Marine Pollutant: No

## SECTION 15 REGULATORY INFORMATION

**TSCA:** Listed in the TSCA inventory  
**SARA 302/304:** Not Listed  
**SARA 311/312:** Acute Health Hazard, Chronic Health Hazard  
**SARA (TITLE 313):** Not Listed  
**CALIFORNIA PROP. 65:** Lead (II) fluoride  
**MASSACHUSETTS RIGHT TO KNOW COMPONENTS:** Lead (II) fluoride  
**NEW JERSEY RIGHT TO KNOW COMPONENTS:** Lead (II) fluoride  
**PENNSYLVANIA RIGHT TO KNOW COMPONENTS:** Lead (II) fluoride

## SECTION 16 OTHER INFORMATION

**DISCLAIMER:** The information herein is believed to be accurate and reliable as of the date compiled. However, Prochem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

**DATE PREPARED:** 01/15