

SAFETY DATA SHEET

LEAD FLUOBORATE

SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION		
Product Name	Lead Fluoborate	
Synonym	Lead(II) tetrafluoroborate; Lead(II) fluoroborate	
Product use	Electroplating & Electro Deposition	
Contact Information	OFFICE : Madras Fluorine Private Ltd No.71, 4 th Main Road Gandhi Nagar, Adyar Chennai 600 020, India E-mail : exim@mplfluorine.com	FACTORY Madras Fluorine Private Ltd Express Highway Manali Chennai – 600 068, India
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Section 2 : Hazards Identification

Statements of Hazard: Toxic, Teratogen, Corrosive, Environmentally hazardous

Acute Health Hazard: Harmful to eyes, skin, mucous membranes and respiratory system.
May be toxic by ingestion, inhalation. Harmful by skin absorption.

Label elements

**Labelling according Regulation (EC) No 1272/2008
Pictogram**



**Signal word Danger
Hazard statement(s)**

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H335 May cause respiratory irritation.
- H350 May cause cancer.
- H360 May damage the unborn child. Suspected of damaging fertility.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H410 Very toxic to aquatic life with long lasting effects.



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Precautionary statement(s)

P201	Obtain special instructions before use.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P303 + P361 + P353	IF ON SKIN (or hair): 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 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.

Supplemental Hazard Statements None

Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3 : COMPOSITION / INFORMATION ON INGREDIENTS

Composition:

Name	CAS #	% by Weight
Lead Tetrafluoroborate	13814-96-5	51
Water	7732-18-5	49

Toxicological Data on Ingredients : Lead tetrafluoroborate LD50 Not available. LC50 Not available

SECTION 4 : FIRST AID MEASURES

Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

Skin Contact:

If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical got on the victim's exposed skin, such as the hands : Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.



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**Inhalation:**

Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. **WARNING:** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:

Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion:

Not available.

SECTION 5 : FIRE-FIGHTING MEASURES

Extinguishing media**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Hydrogen fluoride, Lead oxides

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13



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SECTION 7 : HANDLING AND STORAGE

Precautions:

Keep locked up. Keep container dry. Do not ingest. Do not breathe gas/fumes/ vapour/spray. Never add water to this product In case of insufficient ventilation, wear suitable respiratory equipment If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes May corrode glass. Store in an appropriate container.

Storage:

Keep container tightly closed. Keep in a cool, well-ventilated place. Highly toxic or infectious materials should be stored in a separate locked safety storage cabinet or room.

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:

Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent Gloves

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

Lead tetrafluoroborate

TWA: 0.15 CEIL: 0.45 (mg/m³)

Consult local authorities for acceptable exposure limits.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance	Liquid.
Odor	Not available.
Taste	Not available.
Molecular Weight	Not applicable.
Color	Not available.
pH (1% soln/water)	Neutral.
Boiling Point	The lowest known value is 100°C (212°F) (Water).
Melting Point	Not available.
Critical Temperature	Not available.
Specific Gravity	The only known value is 1 (Water = 1) (Water).
Vapor Pressure	The highest known value is 17.535 mm of Hg (@ 20°C) (Water).



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Vapor Density	The highest known value is 0.62 (Air = 1) (Water).
Volatility	Not available.
Odor Threshold	Not available.
Water/Oil Dist. Coeff.	Not available.
Ionicity (in Water)	Not available.
Dispersion Properties	See solubility in water.
Solubility	Easily soluble in cold water.

SECTION 10 : STABILITY AND REACTIVITY

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Not available.

Corrosivity: Highly corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: No.

SECTION 11 : TOXICOLOGICAL INFORMATION

Routes of Entry: Eye contact. Inhalation. Ingestion.

Toxicity to Animals:

LD50: Not available.

LC50: Not available.

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC [Lead tetrafluoroborate].
The substance is toxic to blood, kidneys, lungs, the nervous system, mucous membranes.

Other Toxic Effects on Humans:

Extremely hazardous in case of ingestion.

Very hazardous in case of skin contact (irritant), of inhalation.

Hazardous in case of skin contact (corrosive).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.



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SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14 : TRANSPORT INFORMATION

UN Number	: 3289
Proper Shipping Name	: TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S.
IMO No	: 6.1 (8)
Dangerous Goods Class	: 6.1
Subsidiary risk	: 8
Packing Group	: II

SECTION 15 : REGULATORY INFORMATION

Federal and State Regulations:

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Lead tetrafluoroborate

Pennsylvania RTK: Lead tetrafluoroborate

Massachusetts RTK: Lead tetrafluoroborate

TSCA 8(b) inventory: Lead tetrafluoroborate; Water

SARA 313 toxic chemical notification and release reporting: Lead tetrafluoroborate

CERCLA: Hazardous substances.: Lead tetrafluoroborate;



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Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada):

CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).

CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC):

R38- Irritating to skin.

R40- Possible risks of irreversible effects.

R41- Risk of serious damage to eyes.

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 0

Reactivity: 0

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves.

Lab coat.

Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

SECTION 16: OTHER INFORMATION

References: Not available.

Other Special Considerations: Not available.

Creation Date 18.9.2000



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