



Material Safety Data Sheet
Lead (II) Fluoride, 99.99%

MSDS# 05962

Section 1 - Chemical Product and Company Identification

MSDS Name: Lead (II) Fluoride, 99.99%
Catalog Numbers: AC212520000, AC212520250
Synonyms: None known.

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

Company Identification: (USA) Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#: 7783-46-2
Chemical Name: Lead Fluoride
%: 99.99
EINECS#: 231-998-8

Hazard Symbols: T



Risk Phrases: 61 20/22 33 62

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Causes eye and skin irritation. May cause respiratory and digestive tract irritation. This product contains lead, a chemical known to the state of California to cause cancer. This product contains lead, a chemical known to the state of California to cause developmental effects. Long-term exposure may cause bone and joint changes. Danger of cumulative effects. Target Organs: Central nervous system, skeletal structures.

Potential Health Effects

Eye: May cause eye irritation. May cause visual disturbances.

Skin: Causes skin irritation.

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Inorganic fluorides can be harmful. Acute exposure to fluorine compounds can lead to digestive tract burns, and abdominal pain. Exposure to fluoride compounds can result in systemic toxic effects on the heart, liver, and kidneys. It may also deplete calcium levels in the body leading to hypocalcemia and death. Fluoride can reduce calcium levels leading to fatal hypocalcemia.

Ingestion: Ingestion of lead compounds can cause toxic effects in the blood-forming organs, kidneys and central nervous

system. Symptoms of lead poisoning or plumbism include weakness, weight loss, lassitude, insomnia, and hypotension. It also includes constipation, anorexia, abdominal discomfort and colic. Symptoms of lead poisoning include; weakness, weight loss, lassitude, insomnia, and hypotension. Acute lead poisoning can cause muscle weakness, "lead line" on the gums, metallic taste, definite loss of appetite, insomnia, dizziness, high lead levels in blood and urine with shock, coma and death in extreme cases.

Inhalation: May cause respiratory tract irritation. May cause effects similar to those described for ingestion.

Chronic: Chronic inhalation and ingestion may cause chronic fluoride poisoning (fluorosis) characterized by weight loss, weakness, anemia, brittle bones, and stiff joints. Effects may be delayed. Chronic exposure to lead may result in plumbism which is characterized by lead line in gum, headache, muscle weakness, mental changes. Chronic exposure to fluoride compounds may cause systemic toxicity. Chronic exposure to lead may cause adverse effects on human reproduction, embryonic and fetal development and postnatal (e.g., mental) development.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician: Use of chelators such as BAL penicillamine and N-acetylpenicillamine should be considered.

Antidote: There exists several chelation agents. The determination of their use should be made only by qualified medical personnel.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated. Non-combustible, substance itself does not burn but may decompose upon heating to produce irritating, corrosive and/or toxic fumes.

Extinguishing Media: Do NOT get water inside containers. For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. Cool containers with flooding quantities of water until well after fire is out.

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: health: 2; flammability: 0; instability: 0;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Wash thoroughly after handling. Use only in a well-ventilated area. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Wash clothing before reuse.

Storage: Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Lead Fluoride	0.05 mg/m3 TWA (as Pb) (listed under Lead, inorganic compounds).	0.050 mg/m3 TWA (as Pb) (listed under Lead compounds).2.5 mg/m3 TWA (inorganic solids, as F, listed under sodium fluoride) (listed under Fluorides, inorganic).100 mg/m3 IDLH (as Pb) (listed	2.5 mg/m3 TWA (as dust) (listed under Fluorides).50 æg/m3 TWA (as Pb) (listed under Lead, inorganic compounds).2.5 mg/m3 TWA (as F) (listed under Fluorides).50 æg/m3 TWA (as Pb); 30 æg/m3

OSHA Vacated PELs: Lead Fluoride: 2.5 mg/m3 TWA (listed under Fluorides)

Engineering Controls:

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves and clothing to prevent skin exposure.

Clothing: Wear appropriate protective gloves and clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Crystals

Color: beige and gray

Odor: none reported

pH: Not available

Vapor Pressure: Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 1293 deg C @ 760.00mmHg (2,359.40°F)

Freezing/Melting Point: 824 deg C (1,515.20°F)

Decomposition Temperature: Not available

Solubility in water: 0.065 G/100 ML WATER (20°C)

Specific Gravity/Density: 8.4450g/cm3

Molecular Formula: F2Pb

Molecular Weight: 245.19

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials, dust generation, excess heat, strong oxidants.

Incompatibilities with Other Materials Strong oxidizing agents, acids, fluorine, hydrogen peroxide, calcium carbide.

Hazardous Decomposition Products Hydrogen fluoride gas, lead/lead oxides.

Hazardous Polymerization Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 7783-46-2: OG1225000

RTECS:

LD50/LC50: CAS# 7783-46-2: Oral, mouse: LD50 = 3015 mg/kg;
Oral, rat: LD50 = 3031 mg/kg;

Carcinogenicity: Lead Fluoride - California: carcinogen, initial date 10/1/92 (Lead compounds). NTP: Suspect carcinogen (Lead compounds). IARC: Group 2A carcinogen (Lead, inorganic compounds).

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Please contact Fisher Scientific for shipping information

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: Not available

Hazard Class:

UN Number:

Packing Group:

USA RQ: CAS# 7783-46-2: 10 lb final RQ; 4.54 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T

Risk Phrases:

R 61 May cause harm to the unborn child.

R 20/22 Harmful by inhalation and if swallowed.

R 33 Danger of cumulative effects.

R 62 Possible risk of impaired fertility.

Safety Phrases:

S 53 Avoid exposure - obtain special instructions before use.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 7783-46-2: 2

Canada

CAS# 7783-46-2 is listed on Canada's DSL List

Canadian WHMIS Classifications: D1B, D2A, D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 7783-46-2 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 7783-46-2 is listed on the TSCA
Inventory.

Section 16 - Other Information

MSDS Creation Date: 9/02/1997

Revision #6 Date 7/20/2009

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 the company 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 the company has been advised of the possibility of such damages.
