



LTS Research Laboratories, Inc.
Safety Data Sheet
Sodium Hexafluorophosphate

1. Product and Company Identification

Trade Name: Sodium Hexafluorophosphate
Chemical Formula: NaPF₆
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.
Street: 2001 Oaks Pkwy
City: Belmont
State: North Carolina
Zip Code: 28012
Country: USA
Tel #: +1 (704) 899 2840

24-Hour Emergency Contact: 800-424-9300 (US & Canada)
+1-703-527-3887 (International)

2. Hazards Identification

Signal Word: Danger



Hazard Statements: H302 + H312 + H332: Harmful if swallowed, in contact with skin or if inhaled.
H314: Causes severe skin burns and eye damage.

Precautionary Statements: P260: Do not breathe dust.
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.
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P312 + P330: IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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 + P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

P363: Wash contaminated clothing before reuse.
P405: Store locked up.
P501: Dispose of contents/ container to an approved waste disposal plant.

HMIS Health Ratings (0-4):

Health:	3
Flammability:	0
Physical:	0

3. Composition

Chemical Family:	Inorganic salt
Additional Names:	N/A

Sodium Hexafluorophosphate (NaPF₆):

Percentage:	0-100 wt%
CAS #:	21324-39-0
EC #:	244-333-1

4. First Aid Procedures

General Treatment:	This product may release hydrofluoric acid. Hydrofluoric acid (HF) requires immediate and specialized first aid and medical treatment. Skin exposure should be immediately treated with the application of 2.5% calcium gluconate gel, repeatedly, until burning subsides. Hydrofluoric acid burns may not be immediately felt by the victim. Subcutaneous calcium gluconate injected may. To prevent fluoride ion absorption in cases of ingestion, administer milk, chewable calcium carbonate tablets, or Milk of Magnesia to conscious individuals. Monitor for complications like hypocalcemia, hypomagnesemia, and cardiac arrhythmias, as they may develop following exposure. Seek urgent medical attention if exposed.
Special Treatment:	Calcium gluconate gel
Important Symptoms:	Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult. Seek medical attention.
Ingestion:	Make victim drink water (two glasses at most). Do NOT induce vomiting. Seek medical attention.
Skin:	Administer topical 2.5% calcium gluconate gel. Wash affected area with mild soap and water. Remove any contaminated clothing. Seek medical attention.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention.

5. Firefighting Measures

Flammability:	N/A
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Extinguishing Media:	Carbon dioxide (CO ₂), dry chemical, chemical foam.
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

6. Accidental Release Measures

If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.
Environmental Precautions:	Isolate runoff to prevent environmental pollution.

7. Handling and Storage

Handling Conditions:	Work under hood. Do not inhale substance/mixture. Immediately change contaminated clothing. Apply preventive skin protection. Wash thoroughly after handling.
Storage Conditions:	Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials: Acids, strong oxidizing agents. Store apart from materials and conditions listed in section 10.
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation:	Provide sufficient ventilation to maintain concentration at or below threshold limit.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits:	N/A
Threshold Limit Value:	N/A
Special Equipment:	None
Respiratory Protection:	Respirator, filter type P2
Protective Gloves:	Rubber gloves
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

9. Physical and Chemical Characteristics

Color	Beige
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	N/A
Water Solubility:	N/A
Boiling Point:	N/A
Melting Point:	200 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	2.3690 g/cc
Molecular weight:	167.95 g/mol

10. Reactivity

Stability:	Stable under recommended storage conditions. Hygroscopic
Reacts With:	Acids, Strong oxidizing agents
Incompatible Conditions:	None
Hazardous Decomposition Products:	Oxides of Phosphorus, Hydrogen Fluoride, Sodium Oxides, Carbon Oxides, Phosphorus Trihydride.

11. Toxicological Information

Potential Health Effects:

Eyes:	Causes eye damage
Skin:	Causes severe skin burns
Ingestion:	Harmful
Inhalation:	May cause irritation
Chronic:	N/A

Signs & Symptoms:

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

Aggravated Medical Conditions:

N/A

Median Lethal Dose:

N/A

Carcinogen:

N/A

Additional Information:

Fluoride ion can reduce serum calcium levels possibly causing fatal hypocalcemia. Cough, Shortness of breath, Headache, Nausea, Vomiting

12. Ecological Information

Aquatic Toxicity:

N/A

Persistent Bioaccumulation Toxicity:

N/A

Very Persistent, Very Bioaccumulative:

N/A

Notes:

Do not empty into drains.

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

Hazardous:

Hazardous for transportation



Hazard Class:

8

Packing Group:

II

UN Number:

UN3260

Proper Shipping Name:

Corrosive solid, acidic, inorganic, n.o.s. (Sodium Hexafluorophosphate)

15. Regulatory Information

Sec 302 Extremely Hazardous:

No

Sec 304 Reportable Quantities:

N/A

Sec 313 Toxic Chemicals:

No

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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