



LTS Research Laboratories, Inc.  
Safety Data Sheet

Potassium Fluoride Dihydrate

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1. Product and Company Identification

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Trade Name: Potassium Fluoride Dihydrate  
Chemical Formula:  $KF \cdot 2H_2O$   
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.  
Street: 37 Ramland Road  
City: Orangeburg  
State: New York  
Zip Code: 10962  
Country: USA  
Tel #: 855-587-2436 / 855-lts-chem

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

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2. Hazards Identification

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Signal Word: Danger



Hazard Statements: H301 + H311 + H331: Toxic if swallowed, in contact with skin or if inhaled.  
H318: Causes serious eye damage.

Precautionary Statements: P261: Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
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 + P310 + P330: IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.  
P302+ P352 + P312: IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell.  
P304 + P340 + P311: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. continue rinsing.  
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.  
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:	1

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3. Composition

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Chemical Family:	Inorganic Compound
Additional Names:	N/A

Potassium Fluoride Dihydrate (KF.2H<sub>2</sub>O):

Percentage:	100 wt%
CAS #:	13455-21-5
EC #:	232-151-5

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4. First Aid Procedures

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General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	None
Important Symptoms:	Causes severe eye damage

Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion:	Give one to two glasses of water. Never induce vomiting or give anything by mouth to an unconscious person.

Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing.
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Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
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5. Firefighting Measures

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Flammability:	Non-flammable, except as powder
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Extinguishing Media:	No special restrictions – use suitable extinguishing agent for surrounding material and type of fire. Do not use water for metal fires – use CO <sub>2</sub> , sand, extinguishing powder.
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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.
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6. Accidental Release Measures

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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.
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Environmental Precautions:	Isolate runoff to prevent environmental pollution.
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## 7. Handling and Storage

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Handling Conditions:	Wash thoroughly after handling. Avoid contact with skin and eyes.
Storage Conditions:	Hygroscopic Store in a cool dry place in a tightly sealed container. 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.

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## 8. Exposure Controls and Personal Protection

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Permissible Exposure Limits:	2.5 mg/m <sup>3</sup> as KF.2H <sub>2</sub> O, long-term value
Threshold Limit Value:	2.5 mg/m <sup>3</sup> as KF.2H <sub>2</sub> O, long-term value
Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Nitrile rubber, NBR 0.11mm thick.
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

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## 9. Physical and Chemical Characteristics

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Color:	White
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	N/A
Water Solubility:	N/A
Boiling Point:	156 °C
Melting Point:	41 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	2.454 g/cc
Molecular weight:	94.13 g/mol

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## 10. Reactivity

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Stability:	Hygroscopic
Reacts With:	Oxidizing agents, Moist air or water, Strong acids.
Incompatible Conditions:	Exposure to moist air or water. Reacts dangerously with glass
Hazardous Decomposition Products:	Metal oxide fume, Hydrogen fluoride, Potassium oxides

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## 11. Toxicological Information

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Potential Health Effects:	
Eyes:	Causes serious eye damage
Skin:	Toxic in contact with skin
Ingestion:	Toxic if swallowed
Inhalation:	Toxic if inhaled
Chronic:	N/A
Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	245 mg/kg for rat by mouth
Carcinogen:	N/A

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## 12. Ecological Information

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Aquatic Toxicity:	N/A
Persistent Bioaccumulation Toxicity:	No
Very Persistent, Very Bioaccumulative:	No
Notes:	N/A

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## 13. Disposal Considerations

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

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## 14. Transportation Data

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Hazardous:	Hazardous for transportation
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Hazard Class:	6.1 Toxic and infectious substances
Packing Group:	III
UN Number:	UN1812
Proper Shipping Name:	Potassium fluoride, solid

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## 15. Regulatory Information

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Sec 302 Extremely Hazardous:	No
Sec 304 Reportable Quantities:	N/A
Sec 313 Toxic Chemicals:	No

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## 16. Other Information

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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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