

## Safety Data Sheet POTASSIUM FLUORIDE

SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION		
<b>Product Name</b>	<b>Potassium Fluoride</b>	
<b>Product Code</b>	088 001	
<b>Other/Generic Names</b>	Potassium Fluoride	
<b>Product Use</b>	Metal finishing, batteries, coatings, photographic chemicals, industrial chemicals, Laboratory chemicals,	
<b>Synonyms</b>	Potassium(I) fluoride	
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<b>Emergency Telephone No:</b>	<b>+91 44 2442 6830 / 2442 0654</b> <b>MON – FRI : 9.30 AM – 6.00 PM</b>	<b>+91 44 3290 0358 / 2901 1768</b> <b>MON – SAT : 9.00 AM – 5.30 PM</b>

SECTION 2 : HAZARDS IDENTIFICATION
<p><b>Classification of the substance or mixture</b>  <b>Classification according to Regulation (EC) No 1272/2008</b>            Acute toxicity, Oral (Category 3), H301            Acute toxicity, Inhalation (Category 3), H331            Acute toxicity, Dermal (Category 3), H311            For the full text of the H-Statements mentioned in this Section, see Section 16.</p> <p><b>Label elements</b>  <b>Labelling according Regulation (EC) No 1272/2008</b>            Pictogram</p> <div style="text-align: center;">  </div> <p>Signal word Danger            Hazard statement(s)            H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled</p>



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Precautionary statement(s)	
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280	Wear protective gloves/ protective clothing.
P301 + P330 + P331 + P310	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/ physician.
P302 + P352 + P312	IF ON SKIN: Wash with plenty of water. Call a POISON CENTER or doctor/ physician if you feel unwell.
P304 + P340 + P311	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
Supplemental Hazard Statements	None

### Other hazards

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

## SECTION 3 : COMPOSITION / INFORMATION ON INGREDIENTS

### Substances

Formula	: KF
Molecular weight	: 58,10 g/mol
CAS-No.	: 7789-23-3
EC-No.	: 232-151-5
Index-No.	: 009-005-00-2

### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
<b>Potassium Fluoride</b>		
CAS-No. 7789-23-3	Acute Tox. 3; H301, H331,	<= 100 %
EC-No. 232-151-5	H311	
Index-No. 009-005-00-2		



#### **SECTION 4 : FIRST AID MEASURES**

**Skin :**

Promptly wash with soap and water, rinsing until clean. Remove contaminated clothing and wash before reuse. Get medical attention for irritation.

**Eyes :**

Immediately flush with running water for at least 15 minutes. Get medical assistance for any irritation or other symptom.

**Inhalation :**

Remove to fresh air. If not breathing, apply mouth to mouth artificial respiration. Get medical assistance.

**Ingestion :**

Do not induce vomiting. If conscious, give milk (preferred) or water. Get immediate medical assistance

**Advice To Physician :**

Fluorides can reduce serum calcium levels resulting in potentially fatal hypocalcemia. Potassium can reduce blood pressure and cause coma.

#### **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, Potassium 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**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**Reference to other sections**

For disposal see section 13.



## SECTION 7 : HANDLING AND STORAGE

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

### Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Hygroscopic. Store under inert gas.

Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

### Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

### Engineering Controls:

Local exhaust ventilation recommended for product transfer areas or other areas where dusty conditions may exist.

### Personal Protective Equipment

#### Skin Protection:

Glove and work clothing. Impervious gloves and protective clothing should be worn if working with product solutions or prolonged contact with solids may occur.

#### Eye Protection:

Chemical safety glasses. Wear chemical safety goggles in dusty conditions or if product mists are present

### Respiratory

#### Protection :

For dusty conditions, use a NIOSH approved dust respirator.

### Additional Recommendations:

Source of running water and eye wash are appropriate.

### Exposure Guidelines

#### Ingredient Name Acgih Tlv Osha Pel Other Limit

Potassium fluoride (as fluoride) 2.5 mg/m<sup>3</sup> (as F)

TWA 2.5 mg/m<sup>3</sup> (as F) TWA F in urine: 3 mg/g creatinine pre shift,

10 mg/g postshift. <sup>3</sup>

<sup>1</sup> = Limit established by General Chemical Corporation.

<sup>2</sup> = Workplace Environmental Exposure Level (AIHA).

<sup>3</sup> = Biological Exposure Index (ACGIH).

### Other Exposure Limits For Potential Decomposition Products:



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SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	White crystal
Physical State	Solid
Molecular Weight	58.1
Chemical Formula	KF
Odor	None
Specific Gravity (water = 1.0)	2.48
Solubility in water (weight %)	48 at 64°F
pH	Solid material
Boiling Point	2741°F
Melting Point	1580°F
Vapor Pressure	Not applicable
Vapor density (air = 1.0)	Not applicable
Evaporation Rate	Negligible
% Volatiles	Negligible
Flash Point	Not flammable
(Flash point method and additional flammability data are found in Section 5.)	

SECTION 10 : STABILITY AND REACTIVITY
<b>Normally Stable? (Conditions To Avoid):</b> Stable. Can absorb moisture from the air; deliquescent .
<b>Incompatibilities:</b> Strong acids. (Contact may generate highly corrosive and toxic hydrofluoric acid.)
<b>Hazardous Decomposition Products:</b> See above. Otherwise, none.
<b>Hazardous Polymerization:</b> Will not occur.



**SECTION 11 : TOXICOLOGICAL INFORMATION**

**Information on toxicological effects**

**Acute toxicity**

LD50 Oral - Rat - 245 mg/kg  
Dermal: No data available  
LD50 Intraperitoneal - Rat - 64 mg/kg  
LD50 Intraperitoneal - Mouse - 40.030 mg/kg

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Potassium fluoride)

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: Not available

Salivation, Nausea, Vomiting, Abdominal pain, Fever, Irregular breathing., Fluoride ion can reduce serum calcium levels possibly causing fatal hypocalcemia., perforation of the nasal septum, calcium deposits in the ligaments, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Inhalation may provoke the following symptoms:, spasm, inflammation and edema of the bronchi, spasm, inflammation and edema of the larynx, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**SECTION 12 : ECOLOGICAL INFORMATION**

**ECOTOXICITY**

Although not classified as environmentally hazardous, harmful effects cannot be excluded in the event of improper handling or disposal. Do not allow to enter drinking water, waste water or soil



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## SECTION 13 : DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### Contaminated packaging

Dispose of as unused product.

## SECTION 14 : TRANSPORT INFORMATION

### UN number

ADR/RID: 1812

IMDG: 1812

IATA: 1812

### UN proper shipping name

ADR/RID : POTASSIUM FLUORIDE, SOLID

IMDG : POTASSIUM FLUORIDE, SOLID

IATA : POTASSIUM FLUORIDE, SOLID

### Transport hazard class(es)

ADR/RID: 6.1

IMDG: 6.1

IATA: 6.1

### Packaging group

ADR/RID: III

IMDG: III

IATA: III

### Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

### Special precautions for user

No data available

## SECTION 15 : REGULATORY INFORMATION

### Toxic Substances Control Act (TSCA)

**TSCA Inventory Status:** Listed on the TSCA Inventory of Chemical Substances

**Other TSCA Issues:** None

### SARA Title III/CERCLA

"Reportable Quantities" (RQs) and/or "Threshold Planning Quantities" (TPQs) exist for the following ingredients.



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## SECTION 16 : OTHER INFORMATION

**Creation Date** : 18.9.2000

**Revision Date** : 25.7.2006

**Other Information:** None

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