SAFETY DATA SHEET: POTASSIUM FLUORIDE

1. IDENTIFICATION

Product Name: POTASSIUM FLUORIDE
Synonyms:
Formula and Formula Weight: KF 58.10
Integra numbers beginning with: P726.10
Recommended Use: Commercial/industrial use
Restrictions on Use: No information available

INTEGRA Chemical Company
24 Hour Emergency Response: CHEMTREC 800-424-9300 (Outside USA 703-527-3887)
1216 6th Ave N
Kent WA 98032
Phone: 253-479-7000

2. HAZARDS IDENTIFICATION

OSHA Classification:
Acute Toxicity - Oral: 3 Toxic if swallowed.
Acute Toxicity - Inhalation: 3 Toxic if inhaled.

Signal Word: DANGER

Precautionary Statements
Prevention:
Avoid breathing dust, fume, gas, mist, vapors, spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.

Response
If swallowed: Immediately call a poison center, doctor.
If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center, doctor.
Specific treatment (see first aid section on this label)
Rinse mouth.

Storage
Store in a well ventilated place. Keep container tightly closed.
Store locked up.

Disposal
Dispose of contents, container in accordance with all governmental regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component: Potassium fluoride
Synonyms: 07789-23-3
% Weight: 100

4. FIRST AID MEASURES

Inhalation: Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult administer oxygen. Seek medical attention.

Eye Contact: Immediately flush eyes with large amounts of water, holding lids apart to ensure rinsing of entire surface. Continue rinsing for at least 15 minutes. Remove contact lenses, if present and easy to do. Washing eyes within several seconds of contact is essential to achieve maximum effectiveness. Get immediate medical attention.

Skin Contact: Remove contaminated clothing. Flush skin with water for at least 15 minutes. Seek medical attention if irritation persists. Apply bandages soaked in magnesium sulfate (epsom salts).

Ingestion: Rinse mouth. Give victim milk, calcium carbonate tablets or milk of magnesia. Never give anything by mouth to an unconscious person. Seek immediate medical assistance.

Additional notes: Symptoms and effects include irritation of the eyes and respiratory system.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Material is not flammable. Use extinguishing media suitable to surrounding materials.

Special Equipment and Precautions: Use water to cool nearby containers and structures. Wear full protective equipment, including suitable respiratory protection.

Specific Hazards: Fire conditions may liberate toxic and noxious fumes.
Hazardous combustion products: Hydrogen fluoride, potassium oxides.

6. ACCIDENTAL RELEASE MEASURES
Spill Procedures: Prevent spread of spill. Wear suitable protective equipment. Sweep or scoop into clean, dry disposal container. Flush spill area with water. Prevent spill from entering drains.

7. HANDLING AND STORAGE
Storage and Handling: Store locked up in a cool, dry, well-ventilated area or cabinet dedicated to the storage of toxic materials. Isolate away from incompatible materials. Keep containers well closed and protect them from physical damage. Hygroscopic. Protect from moisture and store under inert gas.
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Avoid breathing dust, fume, gas, mist, vapors, spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION
OSH & ACGIH Exposure Limits:

<table>
<thead>
<tr>
<th>Substance</th>
<th>OSHA TWA</th>
<th>ACGIH TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium fluoride</td>
<td>2.5 mg/m3 (as F)</td>
<td>2.5 mg/m3 (as F)</td>
</tr>
</tbody>
</table>

Engineering Controls: Use general or local exhaust ventilation to meet TLV and PEL requirements.
Respiratory Protection: Respiratory protection required if airborne concentrations exceed PEL or TLV. Use a NIOSH approved respirator with a particulate filter.
Skin/Eye Protective Equipment: Safety goggles, protective clothing and gloves appropriate for the risk of exposure.
Facilities storing or utilizing this material should have readily accessible eyewash stations and safety showers. Select respirators and other safety equipment in accordance with regulations and based upon the particular conditions of use and risk of exposure. Always use safe chemical-handling and good industrial hygiene practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White crystals or powder.</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting/Freezing Point</td>
<td>860 °C</td>
</tr>
<tr>
<td>Initial Boiling Point and Boiling Range</td>
<td>1505 °C</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Flammable or Explosive</td>
<td>Upper: Not available</td>
</tr>
<tr>
<td>Limits (% by volume in air)</td>
<td>Lower: Not available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not flammable</td>
</tr>
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<td>Flash Point</td>
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</tr>
<tr>
<td>Limits (% by volume in air)</td>
<td>Lower: Not available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>2</td>
</tr>
<tr>
<td>Relative Density</td>
<td>2.48 Water=1</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Partition Coefficient: n-octanol/water</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto-Ignition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity: No information available
Stability: Stable
Possibility of Hazardous Reactions: Hazardous polymerization will not occur
Conditions to Avoid: Moisture.
Incompatibles: Incompatible with strong acids. Glass, porcelain or other silicates. Platinum plus bromine trifluoride.
Decomposition Products: Hydrogen fluoride, potassium oxides.

11. TOXICOLOGICAL INFORMATION

Effects of Over Exposure:

Inhalation: Harmful if inhaled. Causes severe irritation or burns to the respiratory system, coughing, difficulty in breathing, chest pains, pulmonary edema, lung inflammation. Irritation and burning effects may not appear immediately.
Skin Contact: Contact may cause severe irritation or burns. May be absorbed through the skin. Effects may be delayed.
Eye Contact: Contact may burn or damage the eyes.
Ingestion: Harmful or fatal if swallowed. Causes nausea, vomiting, gastrointestinal irritation, burns to the mouth and throat. May cause salivation, diarrhea, weakness, tremors, shallow respiration, carpopedal spasm, convulsions and coma. May cause brain and kidney damage. Affects heart and circulatory system.
Chronic Effects: May cause mottling of teeth, bone damage and fluorosis. Fluorosis is characterized by brittle bones, weight loss, anemia, calcified ligaments and joint stiffness.
Target Organs: Eyes, skin, respiratory system, lungs. Brain, bones, kidneys, heart, circulatory system, central nervous system.
16. OTHER INFORMATION

OSHA SDS #: 26186 rev 101 3/27/2015

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***** END OF SDS *****