Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name
E-Pik 215

Product Use
Acid salt.

Details of the supplier of the safety data sheet
Electrochemical Products Inc.
17000 West Lincoln Ave
New Berlin, WI 53151
Phone: 262-786-9330
Emergency Phone #: NCEC (#EPI-29003) +1 202 464 2554, +44 1865 407333
E-mail: us-sales@epi.com
www.epi.com
Fax: 262-786-9403

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.
Acute Toxicity - Oral - Category 4
Acute Toxicity - Dermal - Category 2

GHS Label Elements

Symbol(s)

Signal Word
Danger

Hazard Statement(s)
Harmful if swallowed.
Fatal in contact with skin.

Precautionary Statement(s)
Prevention
Wear protective gloves/protective clothing/eye protection/face protection.
Do not get in eyes, on skin, or on clothing.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.

Response
None needed according to classification criteria

Storage
Store locked up.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

Statement of Unknown Toxicity
0% of the mixture consists of ingredient(s) of unknown acute toxicity.

Other Hazards
Causes severe eye, skin and respiratory tract irritation. Ingestion of this preparation is unlikely. However, ingestion may produce gastrointestinal irritation and disturbances.

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**Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>CAS</th>
<th>Component Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7681-38-1</td>
<td>Sodium bisulfate</td>
<td>75-95</td>
</tr>
<tr>
<td>7681-49-4</td>
<td>Sodium fluoride</td>
<td>5-20</td>
</tr>
</tbody>
</table>

---

**Section 4 - FIRST AID MEASURES**

**Inhalation**
If inhaled, remove victim to fresh air.

**Skin**
Flush with water. Wash with soap and water.

**Eyes**
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

**Ingestion**
Rinse mouth immediately and drink plenty of water. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do NOT induce vomiting.

**Note to Physicians**
None identified.

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**Section 5 - FIRE FIGHTING MEASURES**

**Extinguishing Media**

**Suitable Extinguishing Media**
Dry chemical, alcohol foam, carbon dioxide, water spray.

**Unsuitable Extinguishing Media**
Avoid using a direct stream of water.

**Special Hazards Arising from the Chemical**
Extinguish all nearby sources of ignition since flammable hydrogen gas will be liberated from contact with some metals.

**Hazardous Combustion Products**
When heated over 570°, sulfur dioxide and sulfur trioxide are formed.

**Fire Fighting Measures**
Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. Firefighters should avoid inhaling any combustion products.

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**Section 6 - ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures**
Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this SDS.

**Methods and Materials for Containment and Cleaning Up**
Sweep up material and place into a sealable, properly labeled container for disposal. Contain the discharged material, if this is without risk.

**Environmental Precautions**
Do not flush to sewer. Comply with regulations for spill reporting.

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**Section 7 - HANDLING AND STORAGE**

**Precautions for Safe Handling**
Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of the material from eyes, skin and clothing.

**Conditions for Safe Storage, Including any Incompatibilities**
Store locked up.
Keep the container tightly closed in original container and in a cool, well-ventilated place.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

<table>
<thead>
<tr>
<th>Component</th>
<th>Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium fluoride</td>
<td>7681-49-4</td>
</tr>
<tr>
<td>NIOSH:</td>
<td>2.5 mg/m³ TWA as F</td>
</tr>
<tr>
<td></td>
<td>250 mg/m³ IDLH as F</td>
</tr>
</tbody>
</table>

EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures
There are no biological limit values for any of this product's components.

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)
There are no biological limit values for any of this product's components.

Engineering Controls
Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.

Individual Protection Measures, such as Personal Protective Equipment
Eye/face protection
Wear chemical goggles; face shield (if splashing is possible).

Skin Protection
Use of protective coveralls and long sleeves is recommended.

Respiratory Protection
If ventilation is not sufficient to effectively prevent buildup of vapor/mist/fume/dust, appropriate NIOSH/MSHA respiratory protection must be provided.

Glove Recommendations
Use of impervious gloves is recommended.

Protective Materials
Eye wash fountain and emergency showers are recommended in the workplace. Use good industrial hygiene practices in handling this material.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Physical State</th>
<th>Powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>White to light tan.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
<td>Color</td>
</tr>
<tr>
<td></td>
<td>White to light tan</td>
<td></td>
</tr>
</tbody>
</table>
### Section 10 - STABILITY AND REACTIVITY

**Reactivity**  
Will not occur.

**Chemical Stability**  
This is a stable material.

**Possibility of Hazardous Reactions**  
Will not occur.

**Conditions to Avoid**  
Avoid contact with extreme heat.

**Incompatible Materials**  
This product may react with alkalis, strong reducing agents, organic compounds and cyanides. Flammable and combustible materials.

**Hazardous decomposition products**  
None, unless heated over 570° at which sulfur dioxide and sulfur trioxide are formed.
Section 11 - TOXICOLOGICAL INFORMATION

Acute and Chronic Toxicity

Component Analysis - LD50/LC50
The components of this material have been reviewed in various sources and the following selected endpoints are published:
- Sodium bisulfate (7681-38-1)
  - Oral LD50 Rat 2490 mg/kg
- Sodium fluoride (7681-49-4)
  - Oral LD50 Rat 52 mg/kg
  - Dermal LD50 Rat 175 mg/kg

Immediate Effects
No information on significant adverse effects.

Delayed Effects
No information on significant adverse effects.

Irritation/Corrosivity Data
No data available.

Respiratory Sensitization
No data available.

Dermal Sensitization
No data available.

Component Carcinogenicity

<table>
<thead>
<tr>
<th>Component</th>
<th>IARC:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium fluoride</td>
<td>Supplement 7 [1987] (Group 3 (not classifiable))</td>
</tr>
</tbody>
</table>

Germ Cell Mutagenicity
No data available.

Tumorigenic Data
No data available.

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.
Medical Conditions Aggravated by Exposure
No data available.

Section 12 - ECOLOGICAL INFORMATION

Component Analysis - Aquatic Toxicity

<table>
<thead>
<tr>
<th>Component Analysis</th>
<th>Aquatic Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium bisulfate</td>
<td>7681-38-1</td>
</tr>
<tr>
<td>Invertebrate:</td>
<td>EC50 48 h Daphnia magna 190 mg/L IUCLID</td>
</tr>
<tr>
<td>Sodium fluoride</td>
<td>7681-49-4</td>
</tr>
<tr>
<td>Fish:</td>
<td>LC50 96 h Lepomis macrochirus &gt;530 mg/L; LC50 96 h Lepomis macrochirus 830 mg/L [semi-static]; LC50 96 h Oncorhynchus mykiss 38 - 68 mg/L [static]; LC50 96 h Pimephales promelas 180 mg/L [semi-static]</td>
</tr>
<tr>
<td>Algae:</td>
<td>EC50 96 h Pseudokirchneriella subcapitata 272 mg/L IUCLID; EC50 72 h Desmodesmus subspicatus 850 mg/L [static] EPA</td>
</tr>
<tr>
<td>Invertebrate:</td>
<td>EC50 48 h Daphnia magna 338 mg/L IUCLID; EC50 48 h Daphnia magna 98 mg/L [Static] EPA</td>
</tr>
</tbody>
</table>

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods
Dispose of waste material in accordance with all applicable Federal, State or provincial and local environmental regulations. See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Section 14 - TRANSPORT INFORMATION

Component Marine Pollutants (TDG)
This material contains one or more of the following chemicals required by CA TDG to be identified as marine pollutants

Sodium fluoride (7681-49-4)
UN1690 (solid); UN3415 (solution)
UN1690 (solid); UN3415 (solution)
Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations
This material contains one or more of the following chemicals required to be identified under SARA
Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4),
TSCA 12(b), and/or require an OSHA process safety plan.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium fluoride</td>
<td>7681-49-4</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

CERCLA: 1000 lb final RQ; 454 kg final RQ

U.S. State Regulations
The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium fluoride</td>
<td>7681-49-4</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Not listed under California Proposition 65

Canada Regulations
This material is a controlled product under Canadian WHMIS regulations.

Canadian WHMIS Ingredient Disclosure List (IDL)
Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure
List. The List is composed of chemicals which must be identified on MSDSs if they are included in
products which meet WHMIS criteria specified in the Controlled Products Regulations and are present
above the threshold limits listed on the IDL.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium bisulfate</td>
<td>7681-38-1</td>
<td>1 %</td>
</tr>
</tbody>
</table>
Safety Data Sheet

Material Name: E-Pik 215
SDS ID: EPI-0233c

Sodium fluoride 7681-49-4

1 %

Component Analysis - Inventory
Sodium bisulfate (7681-38-1)

Yes DSL EIN Yes Yes Yes No Yes Yes Yes

Sodium fluoride (7681-49-4)

Yes DSL EIN Yes Yes Yes No Yes Yes Yes

Section 16 - OTHER INFORMATION

HMIS Rating
Health: 2 Fire: 0 Reactivity: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

NFPA Ratings
Health: 2 Fire: 0 Reactivity: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Key / Legend
ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; JP - Japan; Kow - Octanol/water partition coefficient; KECI - Korea Existing Chemicals Inventory; KECL – Korea Existing Chemicals List; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of
Other Information

Disclaimer:
Reasonable care has been taken in the preparation of this information; however, the manufacturer makes no warranty whatsoever including the warranty of merchantability, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental, consequential, or other such damages resulting from its use or misuse.