

Safety Data Sheet

Issue Date 03-Oct-2011

Revision Date: 04-Sep-2019

Version 1.0

1. IDENTIFICATION

Product Identifier

Product Name Iron 4

Other Means of Identification

Product Code G00154

Recommended use of the Chemical and Restrictions on Use

Recommended Use Rust and mineral stain remover. For industrial use.

Details of the Supplier of the Safety Data Sheet

Victoria Bay Products
255 Route 1 & 9
Jersey City, NJ 07306

Emergency Telephone Number

Company Phone Number Phone: 1-800-226-3233
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Colorless

Physical State Liquid

Odor None

Classification

| | |
|-----------------------------------|------------|
| Acute toxicity - Oral | Category 5 |
| Skin corrosion/irritation | Category 1 |
| Serious eye damage/eye irritation | Category 1 |
| Corrosive to Metals | Category 1 |

Signal Word

Danger



Hazard Statements

Maybe harmful if swallowed.
Causes severe skin burns and eye damage.
May be corrosive to metals.

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray.
Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Keep only in original container.

Precautionary Statements - Response

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 or doctor/physician.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.
Specific measures: Remove from exposure and apply calcium gluconate gel 2.5%.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
IN CASE OF SPILL: Absorb spillage to prevent material damage.

Precautionary Statements - Storage

Store locked up.
Store in corrosive resistant container with a resistant inner liner.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Other Hazards

None known.

Unknown Acute Toxicity

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No | Weight-% |
|---------------------|-----------|----------|
| Water | 7732-18-5 | 60-100 |
| Ammonium Bifluoride | 1341-49-7 | 3-7 |
| Oxalic Acid | 6153-56-6 | 1-5 |

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret

4. FIRST-AID MEASURES

First Aid Measures

| | |
|-----------------------|--|
| General Advice | If exposed or concerned: Get medical advice/attention. When seeking medical attention, emphasize exposure to ammonium bifluoride. |
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove and discard contact lenses. Get immediate medical advice/attention. |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing. Wash contaminated clothing before reuse. Get medical attention immediately. |
| Inhalation | Remove to fresh air. Get medical attention immediately. |
| Ingestion | Rinse mouth. Drink plenty of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention immediately. |

Most Important Symptoms and Effects

| | |
|-----------------|---|
| Symptoms | Irritation and corrosive burns to mouth, throat, and stomach. Corrosive to eyes. Prolonged contact may even cause severe skin irritation or mild burn. May cause hypocalcemia. Can also cause bone and joint changes in humans (Fluorosis). |
|-----------------|---|

Indication of any Immediate Medical Attention and Special Treatment Needed

| | |
|---------------------------|--|
| Notes to Physician | This product contains ammonium bifluoride. |
|---------------------------|--|

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray (fog). Carbon dioxide (CO₂). Dry chemical. Foam.

Unsuitable Extinguishing Media

Not determined.

Specific Hazards Arising from the Chemical

Contents are corrosive and all personal contact must be avoided.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Use personal protective equipment as required.

Environmental Precautions Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Collect spillage. Collect in a clean, dry waste container for disposal. Dilute with water and clean up.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling Wash thoroughly after handling. Use personal protection recommended in Section 8. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only in well-ventilated areas.

Conditions for Safe Storage, including any Incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep locked up and out of reach of children. Keep only in original container. Keep from freezing.

Incompatible Materials Acids. Bases. Oxidizing agents. Uncontrolled contact with water.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-----------------------------------|----------------------------|---|---|
| Ammonium Bifluoride 71341-49-7 | TWA: 2.5 mg/m ³ | TWA: 2.5 mg/m ³ | - |
| Oxalic Acid 6153-56-6 | TWA: 1 mg/m ³ | TWA: 1 mg/m ³ STEL: 2 mg/m ³ | TWA: 1 mg/m ³ STEL: 2 mg/m ³ |

Appropriate Engineering Controls

Engineering Controls Ventilation systems. Eyewash stations. Showers.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Splash goggles or safety glasses.

Skin and Body Protection Rubber, Nitrile, PVC, or other chemically resistant skin protection to prevent contact.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

| | | | |
|-----------------------|-----------|-----------------------|----------------|
| Physical State | Liquid | Odor | None |
| Appearance | Clear | Odor Threshold | Not determined |
| Color | Colorless | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|-------------------------------------|----------------------|--------------------------------|
| pH | 4.5-5.0 | |
| Melting Point/Freezing Point | Not known | |
| Boiling Point/Boiling Range | 100 °C / 212 °F | |
| Flash Point | Not applicable | |
| Evaporation Rate | Not determined | |
| Flammability (Solid, Gas) | n/a-liquid | |
| Upper Flammability Limits | Not determined | |
| Lower Flammability Limit | Not determined | |
| Vapor Pressure | Not determined | |
| Vapor Density | Not determined | |
| Specific Gravity | 1.03 | |
| Water Solubility | Completely soluble | @ 25 °C (77 °F) |
| Solubility in other solvents | Not determined | |
| Partition Coefficient | Not determined | |
| Auto-ignition Temperature | Not determined | |
| Decomposition Temperature | Not determined | |
| Kinematic Viscosity | Not determined | |
| Dynamic Viscosity | Not determined | |
| Explosive Properties | Not determined | |
| Oxidizing Properties | Not determined | |

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children. Keep from freezing.

Incompatible Materials

Acids. Bases. Oxidizing agents. Uncontrolled contact with water.

Hazardous Decomposition Products

Thermal decomposition may release toxic ammonia fumes. It may generate toxic fluorides and hydrogen fluorides. Decomposition by reaction with certain metals releases flammable and explosive hydrogen gas.

11. TOXICOLOGICAL INFORMATION**Information on Likely Routes of Exposure****Product Information**

| | |
|---------------------|------------------------------|
| Eye Contact | Causes severe eye damage. |
| Skin Contact | Causes severe skin burns. |
| Inhalation | Do not inhale. |
| Ingestion | May be harmful if swallowed. |

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|----------------------------------|--------------------------------------|-------------|------------------------|
| Ammonium Bifluoride 1341-49-7 | = 31 mg/kg (Rat) (Intraperitoneal) | - | = 1276 ppm (Rat) 1 h |
| Oxalic Acid 6153-56-6 | = 7500 mg/kg (Rat) | - | - |

Information on Physical, Chemical and Toxicological Effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure

Carcinogenicity Not a human carcinogen.

Numerical Measures of Toxicity

Not determined

Unknown Acute Toxicity None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

| Chemical Name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|----------------------------------|----------------------|-------------------|----------------------------|-----------|
| Ammonium Bifluoride 1341-49-7 | - | > 100 mg/L (96hr) | - | - |
| Oxalic Acid 6153-56-6 | - | = 325 mg/L | - | - |

Persistence/Degradability

Not determined

Bioaccumulation

Not determined

Mobility

Not determined.

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN3264, Corrosive Liquid, Acidic, Inorganic, NOS (Containing Ammonium Bifluoride and Oxalic Acid), 8, PG II

IATA

IMDG
Marine Pollutant

This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

Not determined

US Federal Regulations

CERCLA

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|----------------------------------|--------------------------|----------------|---|
| Ammonium Bifluoride 1341-49-7 | 1000lb | 100 lb | RQ 100 lb final RQ RQ 45.4 kg final RQ |

SARA 311/312 Hazard Categories

| | |
|-----------------------|-----|
| Acute Health Hazard | Yes |
| Chronic Health Hazard | Yes |
| Reactive Hazard | Yes |

SARA 313

| Chemical Name | CAS No | Weight-% | SARA 313 - Threshold Values % |
|---------------------|-----------|----------|-------------------------------|
| Ammonium Bifluoride | 1341-49-7 | 3-7 | 1.0 |

CWA (Clean Water Act)

None listed.

US State Regulations

U.S. State Right-to-Know Regulations

| Chemical Name | State List |
|----------------------------------|------------|
| Ammonium Bifluoride 1341-49-7 | MA, NJ, PA |

AZ – Arizona Ambient Air Quality Guidelines
 CT – Connecticut Hazardous Air Pollutants
 CA – California Director’s List of Hazardous Substances
 CAP65 – California Prop 65
 FL – Florida Substances List
 ID – Idaho Non-Carcinogen Toxic Air Pollutants

IL – Illinois Toxic Air Contaminant
 MA – Massachusetts Right to Know List
 MN – Minnesota Hazardous Substances List
 NJ – New Jersey Right to Know List
 PA – Pennsylvania Right to Know List
 RI – Rhode Island Hazardous Substances List

16. OTHER INFORMATION

| | | | | |
|--------------------|---|---------------------------------------|--------------------------------------|--|
| <u>NFPA</u> | Health Hazards Not determined | Flammability Not determined | Instability Not determined | Special Hazards Not determined |
| <u>HMIS</u> | Health Hazards 3 | Flammability 0 | Physical Hazards 0 | Personal Protection Not determined |

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Keep Out of Reach of Children. For Industrial and Institutional Use Only.

*Denotes changes from last version.

End of Safety Data Sheet