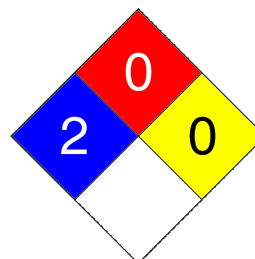


## 1. Product and Company Identification

**Product Name** Super Iron Out Multi Surface  
**CAS #** Mixture  
**Product use** Rust Stain Remover  
**Manufacturer** Iron Out dba Summit Brands  
 7201 Engle Road  
 Fort Wayne, IN 46804-5875 US  
 Phone: 260-483-2519  
 Emergency Phone: 1-800-424-9300 (CHEMTREC)

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	* 2
Flammability	0
Physical Hazard	0
Personal Protection	B



## 2. Hazards Identification

**Emergency overview** DANGER -- CORROSIVE  
 Contains a potential reproductive toxin.

**Potential short term health effects**

**Routes of exposure** Eye, Skin contact, Inhalation, Ingestion.

**Eyes** Causes chemical burns. May cause blindness.

**Skin** Causes chemical burns.

**Inhalation** May cause respiratory tract irritation.

**Ingestion** Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

**Target organs** Eyes. Kidney. Respiratory system. Skin.

**Chronic effects** Prolonged or repeated exposure to dilutions can cause drying, defatting and dermatitis.

**Signs and symptoms** The product causes burns of eyes, skin and mucous membranes.

**OSHA Regulatory Status** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Potential environmental effects** This product has not been tested.

## 3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Urea, monohydrochloride	506-89-8	3 - 7
Oxalic acid	144-62-7	1 - 5
Boric acid	10043-35-3	0.5 - 1.5
Ammonium bifluoride	1341-49-7	0.1 - 1

## 4. First Aid Measures

**First aid procedures**

**Eye contact** Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.

**Skin contact** Immediately flush with cool water for 15 minutes while removing contaminated clothing and shoes. Discard or wash well before reuse. Obtain medical advice immediately.

**Inhalation** If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

**Ingestion** Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

**Notes to physician**

Symptoms may be delayed.

**General advice**

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

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## 5. Fire Fighting Measures

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<b>Flammable properties</b>	Not flammable by WHMIS/OSHA criteria.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Treat for surrounding material.
<b>Unsuitable extinguishing media</b>	Not available
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	Not available
<b>Protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Ammonia. Hydrogen fluoride.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	Not available
<b>Sensitivity to static discharge</b>	Not available

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## 6. Accidental Release Measures

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<b>Personal precautions</b>	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
<b>Environmental precautions</b>	Prevent entry into waterways, sewers, basements or confined areas.
<b>Methods for containment</b>	Stop leak if you can do so without risk.
<b>Methods for cleaning up</b>	Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills to original containers for re-use.

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## 7. Handling and Storage

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<b>Handling</b>	Use good industrial hygiene practices in handling this material. Do not get in eyes, on skin or on clothing. Use only with adequate ventilation. Wash thoroughly after handling.
<b>Storage</b>	Keep out of the reach of children. Store in a closed container away from incompatible materials.

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## 8. Exposure Controls / Personal Protection

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### Exposure limits

Ingredient(s)	Exposure Limits
Ammonium bifluoride	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Boric acid	<b>ACGIH-TLV</b> TWA: 2 mg/m3 STEL: 6 mg/m3 <b>OSHA-PEL</b> Not established
Oxalic acid	<b>ACGIH-TLV</b> TWA: 1 mg/m3 STEL: 2 mg/m3 <b>OSHA-PEL</b> TWA: 1 mg/m3
Urea, monohydrochloride	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established

### Engineering controls

Use only under good ventilation conditions or with respiratory protection.

### Personal protective equipment

#### Eye / face protection

Wear chemical goggles.

#### Hand protection

Rubber gloves. Confirm with a reputable supplier first.

#### Skin and body protection

As required by employer code.

#### Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

#### General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

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## 9. Physical and Chemical Properties

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Appearance	Clear.
Color	Colorless
Form	Liquid
Odor	Lime.
Odor threshold	Not available
Physical state	Liquid
pH	0.8 - 1.3
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Pour point	Not available
Evaporation rate	Not available
Flash point	Not available
Auto-ignition temperature	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	Not available

Vapor density	Not available
Specific gravity	1.022 @21°C
Octanol/water coefficient	Not available
Percent volatile	Not available

## 10. Stability and Reactivity

<b>Reactivity</b>	Reacts vigorously with alkaline material.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Do not mix with other chemicals.
<b>Incompatible materials</b>	Acids. Oxidizers. Caustics. Reducing agents.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Ammonia. Hydrogen fluoride.

## 11. Toxicological Information

### Component analysis - LC50

Ingredient(s)	LC50
Ammonium bifluoride	Not available
Boric acid	3450 mg/kg mouse
Oxalic acid	Not available
Urea, monohydrochloride	Not available

### Component analysis - Oral LD50

Ingredient(s)	LD50
Ammonium bifluoride	130 mg/kg rat
Boric acid	2660 mg/kg rat
Oxalic acid	375 mg/kg rat
Urea, monohydrochloride	1121 mg/kg rat

### Effects of acute exposure

<b>Eye</b>	Causes chemical burns. May cause blindness.
<b>Skin</b>	Causes chemical burns.
<b>Inhalation</b>	May cause respiratory tract irritation.
<b>Ingestion</b>	Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.
<b>Sensitization</b>	Not classified or listed by IARC, NTP, OSHA and ACGIH.
<b>Chronic effects</b>	Not classified or listed by IARC, NTP, OSHA and ACGIH.
<b>Carcinogenicity</b>	See below.
<b>ACGIH - Threshold Limit Values - Carcinogens</b>	
Boric acid	10043-35-3 A4 - Not Classifiable as a Human Carcinogen (listed under Borate compounds, inorganic)
<b>Mutagenicity</b>	Not classified or listed by IARC, NTP, OSHA and ACGIH.
<b>Reproductive effects</b>	Boric acid may cause developmental changes based on published data, at doses many times in excess of those that could occur through inhalation of dust in occupational settings.
<b>Teratogenicity</b>	Not classified or listed by IARC, NTP, OSHA and ACGIH.
<b>Name of Toxicologically Synergistic Products</b>	Not available

## 12. Ecological Information

<b>Ecotoxicity</b>	Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.	
<b>Ecotoxicity - Freshwater Fish - Acute Toxicity Data</b>		
Boric acid	10043-35-3	72 Hr LC50 Carassius auratus: 1020 mg/L [flow-through]
Oxalic acid	144-62-7	24 Hr LC50 Lepomis macrochirus: 4000 mg/L [static]
<b>Ecotoxicity - Water Flea - Acute Toxicity Data</b>		
Boric acid	10043-35-3	48 Hr EC50 Daphnia magna: 115 - 153 mg/L
Oxalic acid	144-62-7	48 Hr EC50 Daphnia magna: 125 - 150 mg/L [Static]
<b>Persistence / degradability</b>	Not available	
<b>Bioaccumulation / accumulation</b>	Not available	
<b>Mobility in environmental media</b>	Not available	
<b>Environmental effects</b>	Not available	
<b>Aquatic toxicity</b>	Not available	
<b>Partition coefficient</b>	Not available	
<b>Chemical fate information</b>	Not available	
<b>Other adverse effects</b>	Not available	

## 13. Disposal Considerations

<b>Disposal instructions</b>	Review federal, state/provincial, and local government requirements prior to disposal.
<b>Waste from residues / unused products</b>	Not available
<b>Contaminated packaging</b>	Not available

## 14. Transport Information

### U.S. Department of Transportation (DOT)

#### Basic shipping requirements:

<b>Proper shipping name</b>	Corrosive liquids, n.o.s. (UREA, MONOHYDROCHLORIDE)
<b>Hazard class</b>	8
<b>UN number</b>	UN1760
<b>Packing group</b>	II
<b>Additional information:</b>	
<b>Special provisions</b>	B2, IB2, T11, TP2, TP27
<b>Packaging exceptions</b>	154
<b>ERG number</b>	154



### Transportation of Dangerous Goods (TDG - Canada)

#### Basic shipping requirements:

<b>Proper shipping name</b>	CORROSIVE LIQUID, N.O.S. (UREA, MONOHYDROCHLORIDE)
<b>Hazard class</b>	8
<b>UN number</b>	UN1760
<b>Packing group</b>	II
<b>Additional information:</b>	
<b>Special provisions</b>	16



## 15. Regulatory Information

**Canadian federal regulations** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**Canada - WHMIS - Ingredient Disclosure List**

Boric acid	10043-35-3	1 %
Oxalic acid	144-62-7	0.1 %

**WHMIS status** Controlled  
**WHMIS classification** Class D - Division 2A, Class E - Corrosive Material  
**WHMIS labeling**



**Occupational Safety and Health Administration (OSHA)**

**29 CFR 1910.1200 hazardous chemical** Yes

**US Federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**CERCLA (Superfund) reportable quantity**

Ammonium bifluoride: 100.0000

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
 Delayed Hazard - Yes  
 Fire Hazard - No  
 Pressure Hazard - No  
 Reactivity Hazard - No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** Yes

**Clean Air Act (CAA)** Not available

**Clean Water Act (CWA)** Not available

**State regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances**

Oxalic acid	144-62-7	Present
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**U.S. - Massachusetts - Right To Know List**

Oxalic acid	144-62-7	Present
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**U.S. - Minnesota - Hazardous Substance List**

Oxalic acid	144-62-7	Present
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**U.S. - New Jersey - Right to Know Hazardous Substance List**

Oxalic acid	144-62-7	sn 1445
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**U.S. - Pennsylvania - RTK (Right to Know) List**

Oxalic acid	144-62-7	Present
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**U.S. - Rhode Island - Hazardous Substance List**

Oxalic acid	144-62-7	Toxic; Flammable
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**Inventory name**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

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## 16. Other Information

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<b>Disclaimer</b>	The data contained in this material safety data sheet was obtained from sources that were technically accurate, reliable, and state of the art when this document was prepared. If data was unavailable to complete certain sections, the absence of that data is identified in this document. Because the supplier cannot know the exact circumstances during actual use of this product, other hazards, exposure scenarios, disposal considerations, and regulations may apply and it is the responsibility of the user to read and understand the product label and this document before use. Do not use the product for purposes other than those stated in Section 1.
<b>Issue date</b>	22-Jun-2011
<b>Effective date</b>	01-Aug-2011
<b>Expiry date</b>	01-Aug-2014
<b>Prepared by</b>	Dell Tech Laboratories Ltd. (519) 858-5021
<b>Other information</b>	For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.