Material Safety Data Sheet

IRON TROL

1. Product and Company Identification

Material name	**IRON TROL**
Patent Number	Not available
Revision date	April-11-2011
Version No.	1
CAS #	Mixture
Manufacturer information	Clearwater International LLC 100 Leetsdale Industrial Dr. Leetsdale, PA 15056 US Product Safety (724)-318-1050 Chemtrec 1-800-424-9300
Emergency	Chemtrec 1-800-424-9300
Supplier information	Producers Service Corp. 109 South Graham St. Zanesville, OH 43701 US
Supplier emergency telephone number(s)	24hr customer Service 740-454-6253

2. Hazards Identification

Emergency overview	Harmful by inhalation, in contact with skin and if swallowed.
OSHA regulatory status	This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects	
Routes of exposure	Inhalation. Skin contact. Eye contact. Ingestion.
Inhalation	Causes burns. Do not breathe dust/fume/gas/mist/vapors/spray.
Ingestion	Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract. Do not ingest.
Potential environmental effects	May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Sulfamic Acid	5329-14-6	40 - 70

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

Skin contact	Wash off with soap and water. Get medical attention if irritation develops or persists.
Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately.
Ingestion	If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice.
Notes to physician	In case of shortness of breath, give oxygen. Keep victim warm.
General advice	In case of shortness of breath, give oxygen. Keep victim warm. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties	Not a fire hazard. The product is not flammable.
Extinguishing media	
Suitable extinguishing media	Dry chemical, CO2, water spray or regular foam.
Protection of firefighters	
Protective equipment and precautions for firefighters	Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out.

6. Accidental Release Measures

Personal precautions	Local authorities should be advised if significant spillages cannot be contained. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unnecessary personnel away. Stay upwind. Keep out of low areas.
Environmental precautions	Prevent further leakage or spillage if safe to do so.
Methods for containment	Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Should not be released into the environment. Large Spills: Dike far ahead of liquid spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. After removal flush contaminated area thoroughly with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly. Never return spills in original containers for re-use.

7. Handling and Storage

Handling	Do not breathe vapors or spray mist. Use only with adequate ventilation. Avoid release to the environment. Wash thoroughly after handling. Avoid prolonged exposure.
Storage	Store in a closed container away from incompatible materials. Store in accordance with local/regional/national/international regulation.

8. Exposure Controls / Personal Protection

Engineering controls	Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye / face protection	Wear chemical goggles. Face-shield.
Skin protection	Wear appropriate chemical resistant gloves.
General hygeine considerations	Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not get this material on clothing. When using do not eat or drink. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Granular.
Color	White
Odor	Not available.
Odor threshold	Not available
Physical state	Liquid.
Form	Liquid.
pH	< 2
Melting point	Not available
Freezing point	Not available
Boiling point	109.4 °F (42.8 °C) estimated
Flash point	N/A
Evaporation rate	Not available
Flammability	Not available.
Flammability limits in air, upper, % by volume	3.72 % estimated
Flammability limits in air, lower, % by volume	3.72 % estimated
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	2.125 estimated
Relative density	2.1248 lb/cu ft estimated
Solubility (water)	Not available
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	415.4 °F (213 °C) estimated
Decomposition temperature	Not available

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Incompatible materials	Water. Amines. Isocyanates. Ammonia. Strong oxidizing agents. Acids.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Acute effects	Acute LD50: 3553 mg/kg estimated, Rat, Oral Causes burns.

Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

Sulfamic Acid	5329-14-6	Oral LD50 Rat: 1450 mg/kg

Chronic effects Not expected to be hazardous by OSHA criteria.

Carcinogenicity Not expected to be hazardous by OSHA criteria.

Neurological effects Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity LC50 176 mg/L estimated, Fish, 96.00 Hours,
Components of this product have been identified as having potential environmental concerns.

Ecotoxicity - Freshwater Fish Species Data

Sulfamic Acid	5329-14-6	96 Hr LC50 Pimephales promelas: 70.3 mg/L [static]

Environmental effects

Ecotoxicity - Freshwater Fish Species Data

Sulfamic Acid	5329-14-6	96 Hr LC50 Pimephales promelas: 70.3 mg/L [static]

13. Disposal Considerations

Waste codes D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]

Disposal instructions Dispose of this material and its container at hazardous or special waste collection point. Do not allow this material to drain into sewers/water supplies. Incinerate the material under controlled conditions in an approved incinerator. Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper shipping name	SULFAMIC ACID MIXTURE
Hazard class	8
UN number	UN2967
Packing group	III

Additional information:

Special provisions	IB3, T7, TP1, TP28
Packaging exceptions	154
Packaging non bulk	203
Packaging bulk	241
ERG number	154

Department of Transportation (DOT) Requirements

Bulk

Basic shipping requirements:

Proper shipping name	SULFAMIC ACID MIXTURE
Hazard class	8
UN number	UN2967
Packing group	III
Additional information:	
Special provisions	IB3, T7, TP1, TP28
Packaging exceptions	154
Packaging non bulk	203
Packaging bulk	241
ERG number	154

Canadian Transportation of Dangerous Goods (TDG) Requirements

Basic shipping requirements:

Proper shipping name	SULFAMIC ACID MIXTURE
Hazard class	8
UN number	UN2967
Packing group	III
Additional information:	
Special provisions	16
ERG number	154

IMDG

Basic shipping requirements:

Proper shipping name	SULFAMIC ACID MIXTURE
Hazard class	8
Subsidiary hazard class	•
UN number	2967
Packing group	III

IATA

Basic shipping requirements:

Proper shipping name	SULFAMIC ACID MIXTURE
Hazard class	8
UN number	2967
Packing group	III

15. Regulatory Information

Labelling

Contains Sulfamic Acid

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

U.S. - FDA - Food Additives Generally Recognized as Safe (GRAS)

Sulfamic Acid	5329-14-6	21 CFR 186.1093

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
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)

International regulations

Canada - WHMIS - Ingredient Disclosure List

Sulfamic Acid	5329-14-6	1 %

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. - New Jersey - Right to Know Hazardous Substance List

Sulfamic Acid	5329-14-6	sn 1770

16. Other Information

HMIS® ratings
Health: 3
Flammability: 0
Physical hazard: 0

NFPA ratings
Health: 3
Flammability: 0
Instability: 0

Disclaimer
THIS PRODUCT'S HEALTH AND SAFETY INFORMATION IS PROVIDED TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH, SAFETY AND ENVIRONMENTAL REGULATIONS. THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE TO US, AND IS BELIEVED TO BE ACCURATE, ALTHOUGH NO GUARANTEE OR WARRANTY IS PROVIDED OR IMPLIED BY THE COMPANY IN THIS RESPECT. SINCE THE USE OF THIS PRODUCT IS WITHIN THE EXCLUSIVE CONTROL OF THE USER, IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE CONDITIONS OF SAFE USE. SUCH CONDITIONS MUST COMPLY WITH ALL GOVERNMENTAL REGULATIONS.

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MSDS sections updated
Hazards Identification: Hazard statements
Physical & Chemical Properties: Color
Other Information: MSDS footer disclaimer