# Safety Data Sheet

**Issue Date:** 01-Apr-2010 **Revision Date:** 20-Mar-2014 **Version** 1

## 1. IDENTIFICATION

**Product Identifier**

**Product Name** CNI 6-IRON 15-0-0

**Other means of identification**

**SDS #** CNI-027

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Plant Nutrients.

**Details of the supplier of the safety data sheet**

**Supplier Address**

CNI AgriMinerals
P.O. Box 3706
Albany, GA 31706

**Emergency Telephone Number**

**Company Phone Number** 1-229-883-5538 (Business)
1-229-439-0842 (fax)

**Emergency Telephone (24 hr)** Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

## 2. HAZARDS IDENTIFICATION

**Appearance** Dark green liquid **Physical State** Liquid **Odor** Earthy odor

**Classification**

**Hazards Not Otherwise Classified (HNOC)**

Causes mild skin irritation

**Unknown Acute Toxicity**

6% of the mixture consists of ingredient(s) of unknown toxicity

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Common Name** Lignin Sulfonate Chelate (complex)/Micronutrient(s).

| Chemical Name | CAS No | Weight-% |
|---|---|---|
| A proprietary blend of Primary Plant Nutrients (N) & Micronutrients in an aqueous solution | Proprietary | 100 |
| Total Nitrogen (Derived from Urea) | Proprietary | 15 (Included in the above blend) |
| Iron (Derived from Iron Citrate) | Proprietary | 6 (Included in the above blend) |
| Sulfur (Derived from Ferrous Sulfate) | Proprietary | 3.5 (Included in the above blend) |

**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**

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediately call a poison center or doctor/physician.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

**Inhalation** Remove from exposure, lie down. If symptoms persist, call a physician.

**Ingestion** If conscious, give large amounts of milk or water and get medical attention. If prompt medical attention is not available, call your local Poison Control Center.

**Most important symptoms and effects**

**Symptoms** Causes mild skin irritation. May cause severe eye irritation. May cause respiratory irritation. Ingestion may cause irritation of the gastrointestinal tract, cramps, vomiting or diarrhea. Ingestion may also cause convulsions, tachyeardia, and may be fatal. Chronic ingestion may cause damage to heart, liver, and blood-forming tissues. Ingestion of large quantities may cause headache, mental impairment, dizziness, and may be fatal.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically. Overexposure may aggravate pre-existing skin and lung disorders.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Do not release runoff from fire control methods to sewers or waterways.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**
None known.

**Hazardous Combustion Products** Nitrogen oxides (NOx). Ammonia. Cyanuric acid. Metal oxide/oxides. Oxides of sulfur.

**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 protection recommended in Section 8.

**For Emergency Responders** Follow applicable OSHA regulations (29 CFR 1910.120).

**Environmental Precautions** Prevent runoff to sewers, streams, and other bodies of water. See Section 12 for additional Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so. For large spills, dike far ahead of liquid spill for later disposal.

**Methods for Clean-Up** For small spills, absorb with sand, clay, or other inert absorbent. For large spills contained material may be salvaged for use if uncontaminated.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Use in accordance with product label instructions.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Store in closed, properly labeled containers in a cool, ventilated area. Store in compatible containers. Keep away from children, pets, domestic animals, and wildlife. Product may be corrosive to aluminum, mild steel and brass. Store in HDPE, fiberglass or stainless steel containers. Use only stainless steel , PVC or polypropylene fittings. Store locked up.

**Packaging Materials** Empty containers should be triple rinsed and use the rinsate in product tank. See Section 13: DISPOSAL CONSIDERATIONS. Do not reuse container.

**Incompatible Materials** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines**

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|
| Iron (Derived from Iron Citrate) | TWA: 1 mg/m$^3$ Fe | (vacated) TWA: 1 mg/m$^3$ Fe | TWA: 1 mg/m$^3$ Fe |
| Sulfur (Derived from Ferrous Sulfate) | TWA: 1 mg/m$^3$ Fe | (vacated) TWA: 1 mg/m$^3$ Fe | TWA: 1 mg/m$^3$ Fe |

**Appropriate engineering controls**

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

**Skin and Body Protection** Wear chemically protective gloves to prevent skin contact. Wear protective clothing. Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

**Respiratory Protection** Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Seek professional advice prior to respirator selection and use. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. WARNING!: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

| | | | |
|---|---|---|---|
| **Physical State** | Liquid | | |
| **Appearance** | Dark green liquid | **Odor** | Earthy odor |
| **Color** | Dark green | **Odor Threshold** | Not determined |

| **Property** | **Values** | **Remarks • Method** |
|---|---|---|
| **pH** | Not determined | |
| **Melting Point/Freezing Point** | < 0 °C / <32 °F | |
| **Boiling Point/Boiling Range** | 87 °C / 190 °F | |
| **Flash Point** | Not available | |
| **Evaporation Rate** | Not determined | |
| **Flammability (Solid, Gas)** | Liquid-not applicable | |
| **Upper Flammability Limits** | Not available | |
| **Lower Flammability Limit** | Not available | |
| **Vapor Pressure** | Not available | |
| **Vapor Density** | Not available | |
| **Specific Gravity** | 1.301-1.311 | (1=Water) |
| **Water Solubility** | Very soluble | |
| **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**
See below - Incompatible Materials.

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Conditions to Avoid**
Keep out of reach of children. Avoid evaporating to dryness.

**Incompatible Materials**
None known based on information supplied.

**Hazardous Decomposition Products**
Metal oxides. Sulfur oxides. Nitrogen oxides (NOx). Ammonia. Cyanuric acid.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information**

**Eye Contact** Avoid contact with eyes.

**Skin Contact** Causes mild skin irritation.

**Inhalation** Avoid breathing vapors or mists.

**Ingestion** Do not taste or swallow.

**Component Information**

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Total Nitrogen (Derived from Urea) | = 8471 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** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Numerical measures of toxicity**
Not determined

**Unknown Acute Toxicity** 6% of the mixture consists of ingredient(s) of unknown toxicity.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. May cause eutrophication.

**Component Information**

| Chemical Name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|---|---|---|---|
| Total Nitrogen (Derived from Urea) | | 16200 - 18300: 96 h Poecilia reticulata mg/L LC50 | | 10000: 24 h Daphnia magna Straus mg/L EC50 3910: 48 h Daphnia magna mg/L EC50 Static |

**Persistence/Degradability**
Not determined.

**Bioaccumulation**
Not determined.

**Mobility**

| Chemical Name | Partition Coefficient |
|---|---|
| Total Nitrogen (Derived from Urea) | -1.59 |

**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. Contact your supplier or a licensed contractor for detailed recommendations.

**Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations. Contact your supplier or a licensed contractor for detailed recommendations.

## 14. TRANSPORT INFORMATION

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

**DOT** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

## 15. REGULATORY INFORMATION

**International Inventories**
Not determined

**Legend:**
***TSCA*** *- United States Toxic Substances Control Act Section 8(b) Inventory*
***DSL/NDSL*** *- Canadian Domestic Substances List/Non-Domestic Substances List*
***EINECS/ELINCS*** *- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
***ENCS*** *- Japan Existing and New Chemical Substances*
***IECSC*** *- China Inventory of Existing Chemical Substances*
***KECL*** *- Korean Existing and Evaluated Chemical Substances*
***PICCS*** *- Philippines Inventory of Chemicals and Chemical Substances*

**US Federal Regulations**

## CERCLA

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|---|---|---|---|
| Sulfur (Derived from Ferrous Sulfate) | 1000 lb | | RQ 1000 lb final RQ<br>RQ 454 kg final RQ |

## SARA 311/312 Hazard Categories

| | |
|---|---|
| **Acute Health Hazard** | Yes |
| **Chronic Health Hazard** | Yes |
| **Fire Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |
| **Reactive Hazard** | No |

## SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

## CWA (Clean Water Act)

| Component | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---|---|---|---|---|
| Sulfur (Derived from Ferrous Sulfate)<br>( 3.5 (Included in the above blend) ) | | | | X |

## US State Regulations

## California Proposition 65

This product does not contain any Proposition 65 chemicals.

## U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---|---|---|---|
| Iron (Derived from Iron Citrate) | | | X |
| Sulfur (Derived from Ferrous Sulfate) | | X | X |

## 16. OTHER INFORMATION

| | | | | |
|---|---|---|---|---|
| **NFPA** | **Health Hazards** | **Flammability** | **Instability** | **Special Hazards** |
| | Not determined | Not determined | Not determined | Not determined |
| **HMIS** | **Health Hazards** | **Flammability** | **Physical Hazards** | **Personal Protection** |
| | Not determined | Not determined | Not determined | Not determined |

**Issue Date:** 01-Apr-2010
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**Revision Note:** New format

**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.**

**End of Safety Data Sheet**