Bonide Garden Rich Liquid Iron plus Micronutrients

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Bonide Garden Rich Liquid Iron plus Micronutrients

Product code : 299

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Fertilizer

1.3. Details of the supplier of the safety data sheet

Bonide Products, LLC
6301 Sutliff Road
Oriskany, NY 13424

Telephone Number: (315) 736-8231
Comment: Bonide hours of operation are 8:00 a.m. to 4:30 p.m EST.

Website: www.bonide.com

Email address: sales@bonide.com

1.4. Emergency telephone numbers (24 hour)

Medical : SafetyCall - (833) 972-1101

Spills : CHEMTREC - 1 (800) 424-9300 and/or 1 (703) 527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Sensitisation, skin 1B H317

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H317 - May cause an allergic skin reaction

Precautionary statements (GHS-US) : P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P352 - IF ON SKIN: Wash with plenty of water.
P321 - Specific treatment (see on this label).
P333 + P317 - If skin irritation or rash occurs: Get medical help.
P362 + P364 - Take off contaminated clothing and wash it before reuse.

SECTION 3: Composition/information on ingredients

Mixture

Name	Product identifier	%
Iron sulfate heptahydrate	(CAS No) 7782-63-0	25

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Assure fresh air breathing. Allow the person to rest. If breathing becomes difficult, contact a medical physician. Give artificial respiration if victim is not breathing and obtain immediate medical attention.

First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: wash throughly with soap and water. Get medical advice/attention.

First-aid measures after eye contact	:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists get medical attention.
First-aid measures after ingestion	:	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Eyes: May cause inflammation, redness, and possible damage with prolonged exposure.
Skin: Prolonged or repeated exposure may cause skin ulcerations and /or burns.
Inhalation: It may cause headaches, nausea, or weakness in case of prolonged exposure. Oxygen can be administered if breathing becomes difficult.
Ingestion: May result in nausea, vomiting, diarrhea, digestive disorders, or chemical burns.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

Flash point: Not flammable.

5.1. Extinguishing media

Suitable extinguishing media	:	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	:	Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Avoid high temperatures that may cause thermal decomposition or explosion, especially in confined or poorly ventilated spaces.

5.3. Advice for firefighters

Firefighting instructions	:	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
Protection during firefighting	:	Do not enter fire area without proper protective equipment, including respiratory protection. Wear positive pressure, self-contained breathing apparatus (SCBA) and goggles. Avoid exposure to smoke or fumes. Contain any liquid runoff.

SECTION 6: Accidental release measures

Spill And Leak Response: For small or incidental spills, the minimum personal protective equipment should be rubber gloves, rubber apron, and chemical goggles. Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. Gas masks with ammonia canister or SCBA gear may be required. For large spills, contain by diking with soil or other non-combustible absorbent material. Dilution with water will reduce the release of ammonia vapors. Keep material out of sewers, storm drains, and surface waters. Comply with all applicable government regulations on spill reporting, handling, and waste disposal.

SECTION 7: Handling and storage

Storage Practices: Store in a cool (above 32□F), dry, well-ventilated area. This product should be stored in tanks constructed of stainless steel, fiberglass, polypropylene, or polyethylene. Valves should be inspected on a regular basis and replaced as needed to prevent leakage. Transfer equipment should be constructed of stainless steel or chemicalresistant plastic. Do no store in aluminum vessels.

Handling Practices: Keep away from incompatible materials. Do not breathe mists. Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Wash with soap and water after handling.

Work/Hygiene Practices: **Avoid getting chemicals ON YOU or IN YOU**. Wash hands with soap and water after handling chemicals. Do not eat or drink around or while handling chemicals. Keep out of reach of children.

SECTION 8: Exposure controls/personal protection

Ventilation/Engineering Controls: Use with adequate ventilation to keep airborne levels below recommended exposure limits.
Respiratory Protection: If work conditions generate vapors or mist, wear a NIOSH approved respirator appropriate for those emission levels. Appropriate respirator may be a full facepiece respirator, an SCBA in the pressure demand mode, or a supplied-air respirator.
Eye Protection: Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, contact lenses should not be worn when working with chemicals because they contribute to the severity of an eye injury.
Hand Protection: Rubber gloves with gauntlets.
Body Protection: Use body protection appropriate for task. Chemical-resistant coveralls and rubber aprons are generally acceptable.
Other Protective Measures: An eyewash and safety shower should be nearby and ready for use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Dark Brown liquid
Color	:	Dark Brown
Odor	:	No odor
pH	:	3 - 4
Freezing point	:	< 32 °F (< 0 °C)
Boiling point	:	> 212 °F (> 100 °C)
Flash point	:	Not applicable

Vapor pressure	:	No data available
Specific gravity	:	1.187
Density	:	10.30 lbs./gallon
Solubility	:	Soluble in water.

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Will not occur.

10.4. Conditions to avoid

Extremely high temperatures.

10.5. Incompatible materials

Strong acids.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

Toxicity Data: Not Available

Acute Effects:

Eyes: Moderate irritant. May cause redness, burning, inflammation, and/or damage.
Skin: Moderate irritant, especially with prolonged exposure. May cause skin ulceration and/or burns.
Ingestion: May cause severe gastrointestinal irritation, vomiting, stomach cramps, and diarrhea. May interfere with circulation and oxygen carrying capacity of blood with prolonged exposure.
Inhalation: May cause irritation to mucous membranes, coughing, or breathing difficulties. If exposed to decomposition gases remove from area immediately.
Chronic Effects: Repeated overexposure may cause dermatitis, conjunctivitis or cataracts.

SECTION 12: Ecological information

Effect Of Material On Plants/Animals: May be harmful to fish, livestock, and wildlife. Dissolved mineral salts may cause irritation of the digestive tract. Non-persistent. Noncumulative when applied using normal agricultural practices.
Effect Of Material On Aquatic Life: Not known

12.5. Other adverse effects

Other information	:	Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	:	Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	:	Avoid release to the environment. Do not contaminate lakes, streams, ponds, estuaries, oceans, or other waters by discharge of waste effluents or equipment rinsate.

SECTION 14: Transport information

This material is not regulated by US DOT for highway transportation.
Other shipping information: Fertilizing Compounds (Manufactured), Liquid, NMFC Item 68140 Sub 6, LTL Class 70.

SECTION 15: Regulatory information

15.1. US Federal regulations

SARA Reporting Requirements: SARA, TITLE III, SECTION 313: This product does not contain toxic chemicals subject to the reporting requirements of Section 313 of The Emergency Planning and Community Right –To-Know Act of 1986 (40CFR 372).

SECTION 16: Other information

Other information	:	None.

SDS US (GHS HazCom 2012) - Pesticides

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.