1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Bougain

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Fertilizer

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name Bougainvillea Growers Intl

Supplier Address 7401 Stringfellow Road
Saint James City
Florida
33956
US

Supplier Phone Number Phone:954-415-2887
Fax:561-424-8005
Contact Phone561-374-9216

Supplier Email bgi-accounting@bgusa.com

Emergency telephone number

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Serious eye damage/eye irritation</th>
<th>Category 1</th>
</tr>
</thead>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>

The supplier identified below generated this SDS using the UL SDS template. UL did not test, certify, or approve the substance described in this SDS, and all information in this SDS was provided by the supplier or was reproduced from publicly available regulatory data sources. UL makes no representations or warranties regarding the completeness or accuracy of the information in this SDS and disclaims all liability in connection with the use of this information or the substance described in this SDS. The layout, appearance and format of this SDS is © 2014 UL LLC. All rights reserved.
GHS Label elements, including precautionary statements

**Emergency Overview**

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Danger</th>
</tr>
</thead>
</table>

**Signal word**

<table>
<thead>
<tr>
<th>Hazard Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Causes serious eye damage</td>
</tr>
</tbody>
</table>

**Appearance** Tan and white with black particles  
**Physical state** Granular Solid  
**Odor** Slight sulfur

**Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

**Eyes**

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

**Precautionary Statements - Storage**

None

**Precautionary Statements - Disposal**

None

**Hazards not otherwise classified (HNOC)**

Not applicable

**Unknown Toxicity**

64.83% of the mixture consists of ingredient(s) of unknown toxicity

**Other information**

May be harmful if swallowed  
Causes mild skin irritation

**Interactions with Other Chemicals**

No information available.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superphosphates, concd.</td>
<td>65996-95-4</td>
<td>3 - 7</td>
<td>*</td>
</tr>
<tr>
<td>Ferrous sulfate heptahydrate</td>
<td>7782-63-0</td>
<td>1 - 5</td>
<td>*</td>
</tr>
<tr>
<td>Copper oxide</td>
<td>1317-38-0</td>
<td>0.1 - 1</td>
<td>*</td>
</tr>
<tr>
<td>Zinc oxide</td>
<td>1314-13-2</td>
<td>0.1 - 1</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First aid measures

General Advice
Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Seek immediate medical attention/advice.

Skin contact
Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

Inhalation
Remove to fresh air. Get medical attention immediately if symptoms occur.

Ingestion
Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

Self-protection of the first aider
Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects
Burning sensation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically.
5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
No information available.

Hazardous Combustion Products
Carbon oxides.

Explosion Data
Sensitivity to Mechanical Impact No.
Sensitivity to Static Discharge No.

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
Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Other Information
Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions
Do not flush into surface water or sanitary sewer system. Prevent product from entering drains.

Methods and material for containment and cleaning up

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

Methods for cleaning up
Pick up and transfer to properly labeled containers.
7. HANDLING AND STORAGE

Precautions for safe handling

Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes. Do not ingest. If swallowed then seek immediate medical assistance.

Conditions for safe storage, including any incompatibilities

Storage
Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

Incompatible Products

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA: 1 mg/m³ Fe</td>
<td>(vacated) TWA: 1 mg/m³ Fe</td>
<td>TWA: 1 mg/m³ Fe</td>
</tr>
<tr>
<td>Ferrous sulfate heptahydrate 7782-63-0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper oxide 1317-38-0</td>
<td>TWA: 1 mg/m³ Cu dust and mist</td>
<td>-</td>
<td>IDLH: 100 mg/m³ Cu dust and mist</td>
</tr>
<tr>
<td></td>
<td>TWA: 0.1 mg/m³ Cu fume</td>
<td></td>
<td>TWA: 0.1 mg/m³ Cu fume</td>
</tr>
<tr>
<td>Zinc oxide 1314-13-2</td>
<td>STEL: 10 mg/m³ respirable fraction</td>
<td>TWA: 5 mg/m³ fume</td>
<td>IDLH: 500 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA: 2 mg/m³ respirable fraction</td>
<td>TWA: 15 mg/m³ total dust</td>
<td>Ceiling: 15 mg/m³ dust</td>
</tr>
<tr>
<td></td>
<td>(vacated) TWA: 5 mg/m³ respirable fraction</td>
<td>TWA: 5 mg/m³ total dust</td>
<td>TWA: 5 mg/m³ dust and fume</td>
</tr>
<tr>
<td></td>
<td>(vacated) TWA: 5 mg/m³ total dust</td>
<td>(vacated) TWA: 10 mg/m³ total dust</td>
<td>STEL: 10 mg/m³ fume</td>
</tr>
</tbody>
</table>

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits Immediately Dangerous to Life or Health

Other Exposure Guidelines
See section 15 for national exposure control parameters

Appropriate engineering controls

Engineering Measures
Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection
Tight sealing safety goggles.

Skin and body protection
Wear protective gloves and protective clothing.
Respiratory protection
No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Granular, Solid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Tan and white with black particles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Slight sulfur</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Values</td>
<td>Remarks</td>
<td>Method</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Melting / freezing point</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Softening Point</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Particle Size</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Particle Size Distribution</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity
No data available.

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous Polymerization
Hazardous polymerization does not occur.

Conditions to avoid
None known based on information supplied.

Incompatible materials

Hazardous Decomposition Products
Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation
Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

Eye contact
Specific test data for the substance or mixture is not available. Severely irritating to eyes. Causes serious eye damage. May cause burns. May cause irreversible damage to eyes.

Skin contact
Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.

Ingestion
Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrous sulfate heptahydrate</td>
<td>= 237 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7782-63-0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc oxide</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1314-13-2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms
Erythema (skin redness). May cause blindness. Burning.

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Sensitization  No information available.
Mutagenic Effects  No information available.
Carcinogenicity  Contains no ingredient listed as a carcinogen.
Reproductive toxicity  No information available.
STOT - single exposure  No information available.
STOT - repeated exposure  No information available.
  Chronic Toxicity  No known effect based on information supplied. May cause adverse liver effects.
Aspiration Hazard  No information available.

Numerical measures of toxicity  Product Information
The following values are calculated based on chapter 3.1 of the GHS document
ATEmix (oral)
2,614.00  mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated.

Persistence and Degradability
No information available.

Bioaccumulation
No information available

Other adverse effects
No information available.
13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods
This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging
Dispose of contents/containers in accordance with local regulations.

California Hazardous Waste Codes  331
This product contains one or more substances that are listed with the State of California as a hazardous waste.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper oxide</td>
<td>Toxic</td>
</tr>
<tr>
<td>1317-38-0</td>
<td></td>
</tr>
<tr>
<td>Zinc oxide</td>
<td>Toxic</td>
</tr>
<tr>
<td>1314-13-2</td>
<td></td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT
Proper Shipping Name
NON REGULATED
Hazard Class
N/A

TDG
Not regulated

MEX
Not regulated

ICAO
Not regulated

IATA
Proper Shipping Name
NON REGULATED
Hazard Class
N/A

IMDG/IMO
Hazard Class
N/A
Marine Pollutant
Product is a marine pollutant according to the criteria set by IMDG/IMO

RID
Not regulated

ADR
Not regulated

ADN
Not regulated

15. REGULATORY INFORMATION

International Inventories
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper oxide - 1317-38-0</td>
<td>1317-38-0</td>
<td>0.1 - 1</td>
<td>1.0</td>
</tr>
<tr>
<td>Zinc oxide - 1314-13-2</td>
<td>1314-13-2</td>
<td>0.1 - 1</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories

- Acute Health Hazard: Yes
- Chronic Health Hazard: No
- Fire Hazard: No
- Sudden release of pressure hazard: No
- Reactive Hazard: No

CWA (Clean Water Act)
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrous sulfate heptahydrate 7782-63-0</td>
<td>1000 lb</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Copper oxide - 1317-38-0</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Zinc oxide - 1314-13-2</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>Extremely Hazardous Substances RQs</th>
<th>RQ</th>
</tr>
</thead>
</table>
| Ferrous sulfate heptahydrate 7782-63-0 | 1000 lb                 |                                   | RQ 1000 lb final RQ
                                                                                           | RQ 454 kg final RQ

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
<th>Rhode Island</th>
<th>Illinois</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium 7440-09-7</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrogen 7727-37-9</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Manganese 7439-96-5</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
International Regulations

Mexico

National occupational exposure limits

<table>
<thead>
<tr>
<th>Component</th>
<th>Carcinogen Status</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrous sulfate heptahydrate</td>
<td></td>
<td>Mexico: TWA 1 mg/m³</td>
</tr>
<tr>
<td>7782-63-0 (1 - 5)</td>
<td></td>
<td>Mexico: STEL 2 mg/m³</td>
</tr>
<tr>
<td>Zinc oxide</td>
<td></td>
<td>Mexico: TWA 5 mg/m³</td>
</tr>
<tr>
<td>1314-13-2 (0.1 - 1)</td>
<td></td>
<td>Mexico: TWA 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico: STEL 10 mg/m³</td>
</tr>
</tbody>
</table>

Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class
D2B - Toxic materials

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>W</td>
</tr>
<tr>
<td>HMIS</td>
<td>Health Hazards</td>
<td>Flammability</td>
<td>Physical Hazard</td>
<td>Personal Protection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

Prepared By
Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Issuing Date
05-May-2015
Revision Date
05-May-2015
Revision Note
No information available

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