



## SAFETY DATA SHEET

**POWERGIZER 45 8-32-5**

SDS REVISIONS: ALL SECTIONS DATE OF ISSUE: 06/05/2018

SUPERSEDES: 09/10/2013

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product identifier**

**Product Name** POWERGIZER 45 8-32-5

**Other means of identification**

**Product Code** FRT-00104

**Document** 1000165951

**Synonyms** None

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

**Recommended Use** Foliar Nutrient. Soil Nutrient.

**Uses advised against** No information available

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

**Manufacturer Address**

LOVELAND PRODUCTS, INC.

P.O. Box 1286

Greeley, CO 80632-1286

**Emergency telephone number**

**Company Phone Number** 1-888-LPI-CUST (574-2878)

**Emergency Telephone** Chemtrec 1-800-424-9300

Medical Emergencies: 1-866-944-8565

US regulations require reporting spills of this material that could reach any surface waters.

The toll-free phone number for the US Coast Guard National Response Center is

1-800-424-8802

### 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Label elements**

The product contains no substances which at their given concentration, are considered to be hazardous to health

**Hazards not otherwise classified (HNOC)**

Not applicable

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**3. COMPOSITION/INFORMATION ON INGREDIENTS****Mixture**

| Chemical Name   | CAS No    | Weight-% | GHS Classification   | Trade Secret |
|-----------------|-----------|----------|--|--------------|
| Ferrous Sulfate | 7720-78-7 | 1 - 5    | Acute Tox. 4 (H302)<br>Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)                             | *            |
| Zinc Sulfate    | 7733-02-0 | 0.1 - 1  | Acute Tox. 4 (H302)<br>Eye Dam. 1 (H318)<br>Aquatic Acute 1 (H400)<br>Aquatic Chronic 1 (H410) | *            |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.  
OSHA Hazard Communication 29 CFR 1910.1200

**4. FIRST AID MEASURES****Description of first aid measures**

|                       |   |
|-----------------------|---|
| <b>General advice</b> | (Get medical attention immediately if symptoms occur.)  |
| <b>Eye contact</b>    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Call a poison control center or doctor for treatment advice. |
| <b>Skin contact</b>   | Take off contaminated clothing. Call a poison control center or doctor for treatment advice.  |
| <b>Inhalation</b>     | Remove to fresh air.  |
| <b>Ingestion</b>      | Clean mouth with water and drink afterwards plenty of water.  |

**Most important symptoms and effects, both acute and delayed**

|                 |                           |
|-----------------|---------------------------|
| <b>Symptoms</b> | No information available. |
|-----------------|---------------------------|

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

|                           |   |
|---------------------------|---|
| <b>Treatment:</b>         | Treat symptomatically. Symptoms may be delayed. Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call 1-866-944-8565 for emergency medical treatment information. |
| <b>Note to physicians</b> | Treat symptomatically.  |
| <b>Antidotes</b>          | No data available   |



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### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

Use extinguishing agent suitable for type of surrounding fire, Use CO<sub>2</sub>, dry chemical, or foam

#### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

#### Protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective gear should be worn in fighting large fires involving chemicals. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and deny unnecessary entry.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

#### Environmental precautions

**Environmental precautions** See Section 12 for additional ecological information.

#### 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

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

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



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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

#### Exposure Guidelines

#### Appropriate engineering controls

#### Engineering Controls

Showers  
Eyewash stations  
Ventilation systems.

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

#### Eye/face protection

Tight sealing safety goggles. Face protection shield.

#### Skin and body protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

#### Respiratory protection

Dependent on job function. If vapors or dusts exceed acceptable levels, wear a MSHA/NIOSH approved air-purifying respirator with any cartridges/filters approved for pesticides. If respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection Standard. Wear a supplied air respirator if exposure concentrations are unknown.

#### General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.



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### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

|                |                   |
|----------------|-------------------|
| Physical state | Liquid            |
| Appearance     | Aqueous solution  |
| Color          | Light brown       |
| Odor           | Slight            |
| Odor threshold | No data available |

| <u>Property</u>                | <u>Values (Remarks - Method)</u> |
|--------------------------------|----------------------------------|
| pH                             | No data available                |
| Melting point / freezing point | No data available                |
| Boiling point                  | No data available                |
| Flash point                    | No data available                |
| Evaporation rate               | No data available                |
| Flammability (solid, gas)      | No data available                |
| Flammability Limit in Air      |                                  |
| Upper flammability limit:      | No data available                |
| Lower flammability limit:      | No data available                |
| Vapor pressure                 | No data available                |
| Vapor density                  | No data available                |
| Specific Gravity               | 1.433 g/ml                       |
| Water solubility               | No data available                |
| Solubility in other solvents   | No data available                |
| Partition coefficient          | No data available                |
| Autoignition temperature       | No data available                |
| Decomposition temperature      | No data available                |
| Kinematic viscosity            | No data available                |
| Dynamic viscosity              | No data available                |
| Explosive properties           | No data available                |
| Oxidizing properties           | No data available                |

#### Other Information

|                 |                   |
|-----------------|-------------------|
| VOC Content (%) | No data available |
| Density         | 11.96lbs/gal      |

**Note:** These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.



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### 10. STABILITY AND REACTIVITY

#### Reactivity

No data available

#### Chemical stability

Stable under recommended storage conditions.

#### Possibility of Hazardous Reactions

None under normal processing.

#### Conditions to avoid

Extremes of temperature and direct sunlight.

#### Incompatible materials

None known based on information supplied.

#### Hazardous Decomposition Products

None known based on information supplied.

### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity of the formulated product:

| Chemical Name   | Oral LD <sub>50</sub> | Dermal LD <sub>50</sub> | Inhalation LC <sub>50</sub> |
|-----------------|-----------------------|-------------------------|-----------------------------|
| Ferrous Sulfate | = 319 mg/kg ( Rat )   |                         |                             |
| Zinc Sulfate    | = 1710 mg/kg ( Rat )  |                         |                             |

| Chemical Name                | Skin corrosion/irritation | Eye damage/irritation | Respiratory sensitization | Skin sensitization |
|------------------------------|---------------------------|-----------------------|---------------------------|--------------------|
| Ferrous Sulfate<br>7720-78-7 | Category 2                | Category 2            |                           |                    |
| Zinc Sulfate<br>7733-02-0    |                           | Category 1            |                           |                    |

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

##### **Germ cell mutagenicity**

No information available.

##### **Carcinogenicity**

No information available.

##### **Reproductive toxicity**

No information available.

##### **STOT - single exposure**

No information available.

##### **STOT - repeated exposure**

No information available.

##### **Chronic toxicity**

May cause adverse liver effects.

##### **Target Organ Effects**

Eye damage/irritation, Gastrointestinal tract (GI), liver, Respiratory system, Skin.

##### **Aspiration hazard**

No information available.

#### Information on likely routes of exposure

##### **Product Information**

No data available

##### **Inhalation**

No data available.

##### **Eye contact**

No data available.

##### **Skin contact**

No data available.

##### **Ingestion**

No data available.



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### 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

| Chemical Name                | Algae/aquatic plants  | Fish   | Crustacea  |
|------------------------------|---|--|--|
| Ferrous Sulfate<br>7720-78-7 | -   | LC50 0.56 mg/L 96 h Cyprinus carpio LC50 925 mg/L 96 h Poecilia reticulata   | EC50 6.15 - 9.26 mg/L 48 h Daphnia magna EC50 152 mg/L 48 h Daphnia magna    |
| Zinc Sulfate<br>7733-02-0    | EC50 0.056 mg/L 72 h Pseudokirchneriella subcapitata EC50 64.8 mg/L 72 h Chlorella vulgaris EC50 2.4 mg/L 96 h Chlorella vulgaris | LC50 0.162 mg/L 96 h Oncorhynchus mykiss LC50 0.03 - 0.05 mg/L 96 h Oncorhynchus mykiss LC50 0.34 - 0.93 mg/L 96 h Oncorhynchus mykiss LC50 0.218 - 0.42 mg/L 96 h Pimephales promelas LC50 0.06 mg/L 96 h Pimephales promelas LC50 0.23 - 0.48 mg/L 96 h Pimephales promelas LC50 49.23 - 64.16 mg/L 96 h Poecilia reticulata LC50 0.48 - 1.72 mg/L 96 h Poecilia reticulata LC50 0.168 - 0.25 mg/L 96 h Pimephales promelas LC50 0.15 mg/L 96 h Cyprinus carpio LC50 16.85 - 27.18 mg/L 96 h Cyprinus carpio LC50 3 - 4.6 mg/L 96 h Lepomis macrochirus LC50 3.55 - 6.32 mg/L 96 h Lepomis macrochirus LC50 0.63 mg/L 96 h Poecilia reticulata | EC50 0.75 mg/L 48 h Daphnia magna EC50 0.538 - 0.908 mg/L 48 h Daphnia magna |

#### Persistence and degradability

No information available.

#### Bioaccumulation

No information available.

#### Other adverse effects

No information available

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

##### **Disposal of wastes**

Wastes may be disposed of on site or at an approved waste disposal facility. Triple rinse (or equivalent), adding rinse water to spray tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by appropriate authorities. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at <http://www.acrecycle.org/>. Do not contaminate water, food or feed by storage or disposal.

##### **Contaminated packaging**

Do not reuse container.

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**14. TRANSPORT INFORMATION****DOT**

UN/ID no

Not regulated

Proper shipping name

Not regulated

U.S. Surface Freight Classification:

FERTILIZING COMPOUNDS (MANUFACTURED  
FERTILIZERS), NOI, LIQUID (NMFC 68140, SUB 6; CLASS 70)**15. REGULATORY INFORMATION**

|             |                  |                |                    |                                    |
|-------------|------------------|----------------|--------------------|------------------------------------|
| <b>NFPA</b> | Health hazards 0 | Flammability 0 | Instability 0      | Physical and Chemical Properties - |
| <b>HMIS</b> | Health hazards 0 | Flammability 0 | Physical hazards 0 | Personal protection X              |
|             | 0 - Least        | 1 - Slight     | 2 - Moderate       | 3 - High                           |
|             |                  |                |                    | 4 - Severe                         |

**US Federal Regulations****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

**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)

| Chemical Name                | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Ferrous Sulfate<br>7720-78-7 | 1000 lb                     | -                      | -                         | X                          |
| Zinc Sulfate<br>7733-02-0    | 1000 lb                     | X                      | -                         | X                          |

**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)

| Chemical Name                | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ)                  |
|------------------------------|--------------------------|----------------|---|
| Ferrous Sulfate<br>7720-78-7 | 1000 lb                  | -              | RQ 1000 lb final RQ<br>RQ 454 kg final RQ |
| Zinc Sulfate<br>7733-02-0    | 1000 lb                  | -              | RQ 1000 lb final RQ<br>RQ 454 kg final RQ |

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. EPA Label Information**





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### 16. OTHER INFORMATION

**Prepared By** Registrations and Regulatory Affairs

**Reviewed By** Safety, Health and Environment

**Issue Date** 06/05/2018

**Revision Date** 06/05/2018

**Revision Note**

16 SDS sections updated

**POWERGIZER 45 8-32-5** is a registered trademark of Cheetah Chemical. Inc.

**Disclaimer**

This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS, INC. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.

**End of Safety Data Sheet**