

SAFETY DATA SHEET

SDS NUMBER: 1000368176-15-LPI

SDS REVISIONS: FORMAT

DATE OF ISSUE: 04/22/15

8% AM COPPER

SUPERSEDES: 10/30/12

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 PRODUCT IDENTIFIER:

TRADE NAME: **8% AM COPPER 6-0-0**

1.2 **RECOMMENDED USE:** AGRICULTURAL PLANT NUTRIENT COMPLEX

1.3 SUPPLIER DETAILS:

LOVELAND PRODUCTS, INC.

P.O. Box 1286 • Greeley, CO 80632-1286

1.4 **24-Hour Emergency Phone:** 1-800-424-9300 - **Medical Emergencies:** 1-866-944-8565

U.S. Coast Guard National Response Center: 1-800-424-8802

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to 29 CFR 1910.1200

Eye Damage/Irritation

Category 2B

H320

Acute Toxicity/Oral

Category 4

H302

2.2 Label elements



Signal word:

WARNING

Hazard Statement:

H320 – Causes eye irritation.

H302 – Harmful if swallowed.

Precautionary Statement:

P264 – Wash hands and face thoroughly after handling.

P270 – Do not eat, drink or smoke when using this product

(Prevention):

P301+P312 – IF SWALLOWED: Call a Poison Center or doctor/physician if you feel unwell.

Precautionary Statement:

P330 – Rinse mouth.

(Response):

P305+P351+P338 – IF IN EYES: Rinse with water for 15 to 20 minutes. Remove contact lenses, if present, and continue rinsing eyes.

P337+P313 – If eye irritation persists: Get medical advice/attention.

Precautionary Statement:

(General):

P101+P102+P103 – If medical advice is needed, have product container or label available. Keep out of reach of children.

Read label before use

2.3 Other hazards

None known

SAFETY DATA SHEET

SDS NUMBER: 1000368176-15-LPI

SDS REVISIONS: FORMAT

DATE OF ISSUE: 04/22/15

8% AM COPPER

SUPERSEDES: 10/30/12

3. COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

Classification according to 29 CFR 1910.1200

3.2 Mixtures

| Chemical Name: | CAS No. | Classification | Concentration [%] |
|--------------------|-----------|--------------------------|-------------------|
| Ammonium Hydroxide | 1336-21-6 | Eye Irrit. 2B; H320 | 32.00 |
| Copper Sulfate | 7758-99-8 | Acute tox, Oral.: 4 H302 | 32.00 |
| Citric Acid | 77-92-9 | | 7.25 |
| Water | 7732-18-5 | | Balance |

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice: Get medical attention if symptoms occur.

Eye contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.**Ingestion:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.**Skin contact:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.**Inhalation:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.**4.2 Most Important Symptoms and Effects, Acute and Delayed**

Symptoms: Eye irritation. Harmful if swallowed.

4.3 Immediate Medical Attention and Special Treatment

Treatment: Treat symptomatically. Symptoms may be delayed.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565

Take container, label or product name with you when seeking medical attention.

NOTES TO PHYSICIAN: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:Suitable Extinguishing Media: Foam, carbon dioxide (CO₂), dry powder, water spray. Do not use water jet as this will spread the fire.**5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:**

Specific Hazards During Firefighting: During a fire, oxides of carbon and silicon dioxide can be released.

5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Special Protective Equipment 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.

SAFETY DATA SHEET

SDS NUMBER: 1000368176-15-LPI

SDS REVISIONS: FORMAT

DATE OF ISSUE: 04/22/15

8% AM COPPER

SUPERSEDES: 10/30/12

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions: Avoid inhalation of vapors, dusts and spray mist and contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing.

6.2 ENVIRONMENTAL PRECAUTIONS

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not contaminate water. Do not allow to enter drains, sewers, or watercourses.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

Methods for Clean-Up: Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. After removal flush contaminated area thoroughly with water.
Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to Remove residual contamination.
Never return spills to original containers for re-use.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if fertilizer gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers: Store in original containers only. Keep containers tightly closed when not in use. Store in a cool, dry well-ventilated area, preferably in a locked storage area away from children, feed and food products, and seed. Store at ambient temperatures. Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS:

OCCUPATIONAL EXPOSURE LIMITS

U.S. Workplace Exposure Level (ACGIH) TLVs

| Components | Type | Value |
|-------------------|------|-------|
| No data available | | |

U.S. Workplace Exposure Level (OSHA) PELs

| Components | Type | Value |
|-------------------|------|-------|
| No data available | | |

Biological limit values

ACGIH Biological Exposure Indices

| Components | Value | Specimen |
|-------------|-------|----------|
| No listings | | |

8.2 EXPOSURE CONTROLS:

Engineering Measures

Provide adequate general and local exhaust ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors and spray mists. Provide eyewash station and safety shower.

Individual Protection Measures:

Eye / Face Protection: Goggles or shielded safety glasses are recommended.

Skin Protection: Chemical resistant clothing is recommended. Routinely wash work clothing and protective equipment to remove contaminants. The use of chemical-resistant gloves is recommended when handling undiluted product. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Respiratory Protection: In case of inadequate ventilation or risk of inhalation of dusts or vapors, use suitable respiratory equipment such as MSHA/NIOSH TC-21C or NIOSH approved respirator with N, R, P or HE filter. Wear respiratory protection during operations where spraying or misting occurs. If respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection standard. Wear air supplied respiratory protection if exposure concentrations are unknown.

SAFETY DATA SHEET

SDS NUMBER: 1000368176-15-LPI

SDS REVISIONS: FORMAT

DATE OF ISSUE: 04/22/15

8% AM COPPER

SUPERSEDES: 10/30/12

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 APPEARANCE : Liquid
ODOR: Slight ammonia.
ODOR THRESHOLD: No data available.
COLOR: Dark blue.
pH: 8.5.
MELTING POINT / FREEZING POINT: No data available
BOILING POINT: >200°F (>93°C)
FLASH POINT: Not flammable
FLAMMABILITY (solid, gas): No data available.
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: No data available.
VAPOR PRESSURE: No data available.
SOLUBILITY: Soluble
PARTITION CO-EFFICIENT, n-OCTANOL / WATER: No data available.
AUTO-IGNITION TEMPERATURE: No data available.
DECOMPOSITION TEMPERATURE: No data available
VISCOSITY, dynamic: No data available
SPECIFIC GRAVITY (Water = 1): 1.259 g/ml
BULK DENSITY: 10.51 lbs./gal. / 1.26 kg/L

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.

10. STABILITY AND REACTIVITY

10.1 REACTIVITY

Stable

10.2 CHEMICAL STABILITY

Stable under normal temperature conditions

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No reactions known under normal use conditions. Will not polymerize.

10.4 CONDITIONS TO AVOID

None known.

10.5 INCOMPATIBLE MATERIALS

None known.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Can include ammonia, oxides of phosphorous, phosphine, and oxides of carbon.

11. TOXICOLOGICAL INFORMATION

11.1 LIKELY ROUTES OF EXPOSURE

Eye contact, skin contact. Ingestion.

LC₅₀ (rat): No data available

LD₅₀ Oral (rat): 5,040 mg/kg (Citric Acid).

LD₅₀ Dermal (rat): No data available.

Acute Toxicity Estimates: No data available

Skin Irritation (rabbit): May cause slight irritation

Eye Irritation (rabbit): Causes eye irritation.

Specific Target Organ Toxicity: Single exposure: No data available.

Aspiration: No data available

Skin Sensitization (guinea pig): Not a sensitizer

Carcinogenicity: No data available

Germ Cell Mutagenicity: No data available

Interactive Effects: None known

SAFETY DATA SHEET

SDS NUMBER: 1000368176-15-LPI

SDS REVISIONS: FORMAT

DATE OF ISSUE: 04/22/15

8% AM COPPER

SUPERSEDES: 10/30/12

12. ECOLOGICAL INFORMATION**12.1 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. This product is not intended for use in aquatic settings.

Ecotoxicological Data

| Components | Species | Test Results |
|-------------------|---------|--------------|
| No data available | | |

Drift or runoff may adversely affect non-target plants.
 Do not apply directly to water.
 Do not contaminate water when disposing of equipment wash water.
 Do not apply when weather conditions favor drift from target area.

12.2 PERSISTENCE AND DEGRADABILITY

Biodegradability: No data available

12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: Readily biodegradable.

12.4 MOBILITY IN SOIL

No data available.

12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

13. DISPOSAL CONSIDERATIONS**13.1 WASTE TREATMENT METHODS**

Do not reuse container. Plastic: Triple rinse (or equivalent), adding rinse water to spray tank, then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not contaminate water, food, or feed by storage or disposal. Do not contaminate water, food or feed by storage or disposal.

14. TRANSPORT INFORMATION**14.1 LAND TRANSPORT**

DOT Shipping Description: NOT REGULATED.

U.S. Surface Freight Classification: FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI; LIQUID (NMFC 68140, SUB 6; CLASS 70)

15. REGULATORY INFORMATION**15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS****NFPA & HMIS Hazard Ratings:****NFPA**

| | | | |
|---|--------------|---|----------|
| 1 | Health | 0 | Least |
| 0 | Flammability | 1 | Slight |
| 0 | Instability | 2 | Moderate |
| | | 3 | High |
| | | 4 | Severe |

HMIS

| | |
|---|--------------|
| 1 | Health |
| 0 | Flammability |
| 0 | Reactivity |
| B | PPE |

SAFETY DATA SHEET

SDS NUMBER: 1000368176-15-LPI

SDS REVISIONS: FORMAT

DATE OF ISSUE: 04/22/15

8% AM COPPER

SUPERSEDES: 10/30/12

SARA Hazard Notification/Reporting**SARA Title III Hazard Category:**Immediate Y
Delayed NFire N
Reactive NSudden Release of Pressure N**Reportable Quantity (RQ) under U.S. CERCLA:** Ammonium Hydroxide (CAS: 1336-21-6) 1000 lbs.; Copper (Cupric) Sulfate (CAS: 7758-98-7) 10 lbs.**SARA, Title III, Section 313:** Ammonium Hydroxide (CAS: 1336-21-6); Copper Compounds**RCRA Waste Code:** Not listed**CA Proposition 65: WARNING:** This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

16. OTHER INFORMATION

SDS STATUS: All sections reviewed; change in format**PREPARED BY:** Registrations and Regulatory Affairs**REVIEWED BY:** Environmental Health and Safety

Disclaimer and Limitation of Liability: 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.