

SAFETY DATA SHEET

SDS NUMBER: 1000541955-14-LPI

SDS REVISIONS: NEW

DATE OF ISSUE: 01/28/14

SULFIGHT™ 5-0-15

SUPERSEDES: NEW

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:** SULFIGHT™ 5-0-15**1.2 RECOMMENDED USE:** FERTILIZER**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**

Not classified

2.2 Label elements

Further information : The product does not need to be labeled in accordance with EC directives or respective national laws.

2.3 Other hazards

None known

KEEP OUT OF REACH OF CHILDREN –

Appearance and odor: Yellow crystalline solid with faint to slight odor.

CAUTION – POSSIBLE SKIN IRRITATION – POSSIBLE EYE IRRITATION – POSSIBLE MUCOUS MEMBRANE IRRITATION**Potential Health effects****Routes of exposure** Eye contact, skin contact, inhalation.**Eyes** Can cause eye irritation.**Skin** Can cause skin irritation.**Inhalation** May be irritating to respiratory system.**Ingestion** May be irritating to mouth, throat, and stomach.**Target organs** Skin. Eyes. Inhalation.**Signs and symptoms** May cause irritation to the eyes, skin, gastrointestinal tract, and respiratory system.**Potential environmental effects** This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have harmful or damaging effect on the environment.**3. COMPOSITION, INFORMATION ON INGREDIENTS****3.2 Mixtures**

| Chemical Name: | CAS No. | Classification | Concentration [%] |
|---------------------------------|-------------|----------------|-------------------|
| Urea | 57-13-6 | | > 10 |
| Ferric Sodium EDTA | 15708-41-5 | | < 5 |
| Dimethyl Sulfone | 67-71-0 | | > 10 |
| Proprietary Potassium Compounds | Proprietary | | > 10 |
| Organic Acid Salt | Proprietary | | > 1 |

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 centre 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.

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4.2 Most Important Symptoms and Effects, Acute and Delayed

Symptoms: Risk of damage to eyes. Skin irritation. Mucous membrane irritation.

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: Water fog, water spray, carbon dioxide (CO₂), foam. 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, irritating, corrosive and/or toxic gases may be produced.

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.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions: Avoid inhalation of vapors 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 spilled liquid from solutions of this product with 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 : Avoid breathing fertilizer mists. Avoid prolonged or repeated skin contact. Avoid eye contact. Wash hands thoroughly after using this product and before eating, drinking, chewing gum, using tobacco or using the toilet.

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 above 32°F / 0°C. Do not contaminate water, food, or feed by storage or disposal.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1 CONTROL PARAMETERS:
OCCUPATIONAL EXPOSURE LIMITS****AIHA WEELs TWA**

| Components | Type | Value |
|------------------------|------|----------------------|
| Urea (CAS: 57-13-6) | TWA | 10 mg/m ³ |

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 vapors, use suitable respiratory equipment. Wear respiratory protection during operations where spraying or misting occurs. In the U.S.A., 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|--|
| 9.1 APPEARANCE : | Crystalline solid |
| ODOR: | Faint to slight. |
| ODOR THRESHOLD: | 0.1 ppm. |
| COLOR: | Yellow. |
| pH: | 6.0 (10% solution) |
| MELTING POINT / FREEZING POINT: | > 230°F / > 110°C |
| BOILING POINT: | No data available |
| FLASH POINT: | Does not flash |
| FLAMMABILITY (solid, gas): | Does not support combustion. |
| UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: | Not applicable. |
| VAPOR PRESSURE: | No data available. |
| SOLUBILITY: | Soluble |
| PARTITION CO-EFFICIENT, n-OCTANOL / WATER: | No data. |
| AUTO-IGNITION TEMPERATURE: | No data available. |
| DECOMPOSITION TEMPERATURE: | Not determined |
| VISCOSITY: | Not determined |
| SPECIFIC GRAVITY (Water = 1): | 0.803 g/ml |
| BULK DENSITY: | 50.15 lbs/ft ³ / 803 kg/m ³ (Packed) |

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**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

Exposure to extreme temperatures and incompatible materials.

10.5 INCOMPATIBLE MATERIALS

Strong bases, strong oxidizers, and strong reducers.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

When exposed to extremely high temperatures, the components of this product will decompose to produce irritating vapors and toxic gases including oxides of phosphorous, oxides of sulfur, oxides of carbon, ammonia, and phosphine.

11. TOXICOLOGICAL INFORMATION**11.1 LIKELY ROUTES OF EXPOSURE**

Skin contact, eye contact.

LC₅₀ (rat): No data.**LD₅₀ Oral (rat):** 3 g/kg (Organic Acid Salt)**LD₅₀ Dermal (rat):** No data available**Acute Toxicity Estimates:** No data available**Skin Irritation (rabbit):** No data available**Eye Irritation (rabbit):** No data available**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**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.

Ecotoxicological Data

| Components | Species | Test Results |
|--|-----------------------------|--------------------------------|
| Organic acid | | |
| Aquatic | | |
| Crustacea | EC ₅₀ Shore crab | 160 ppm, 48 hours / salt water |
| Fish | LC ₅₀ Goldfish | 894 ppm, 4 hours / fresh water |
| Material is dangerous to fish and other aquatic organisms in high concentrations | | |

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: The product is not readily biodegradable

12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: No data available.

12.4 MOBILITY IN SOIL

This product is water soluble and may disperse in soil.

12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

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

Do not reuse container. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. Do not contaminate water, food or feed by storage and disposal.

14. TRANSPORT INFORMATION**14.1 LAND TRANSPORT**

DOT Shipping Description: NOT REGULATED

U.S. Surface Freight Classification: FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI; DRY (NMFC 68140, SUB 5; CLASS 50)

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

NFPA

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

HMIS

| | |
|---|--------------|
| 2 | Health |
| 0 | Flammability |
| 0 | Reactivity |
| B | PPE |

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: Not listed

SARA, Title III, Section 313: Not listed

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: New

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

SulFight is a trademark of Loveland Products Inc.

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