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: LOK 1.2 RECOMMENDED USE: FER
 - LOKOMOTIVE® 2-0-25 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 (67/548/EEC, 1999/45/EC) Not classified

2.2 Label elements



: 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: Clear, colorless liquid with slight odor.

CAUTION – POSSIBLE SKIN IRRITATION – POSSIBLE EYE IRRITATION – POSSIBLE RESPIRATORY TRACT IRRITATION Potential Health effects

| Routes of exposure | | Eye contact, skin contact, inhalation. | | |
|--------------------|---------------------------------|--|--|--|
| | Eyes | May cause eye irritation. | | |
| | Skin | May 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 bazardous. However, this does not exclude the possibility that | | |

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 |
|-------------------|-----------|----------------|---------------|
| | EC-No. | (67/548/EEC) | [%] |
| Urea | 57-13-6 | | 4 - 6 |
| Potassium Acetate | 127-08-2 | | 6 - 8 |
| Water | 7732-18-5 | | 40 - 70 |

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

n 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. Respiratory tract 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
- 5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECADITIONS 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 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 :

Avoid inhalation of vapors / spray and contact with eyes, skin and clothing. Do not breathe mist or vapor. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. Wash thoroughly after handling. Do not empty into drains. Handle and open container with care. Use care in handling/storage. Wash before eating, drinking and/or smoking.

7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers :

Keep container tightly closed. Store in a cool, dry, well-ventilated area. Do not store below 0°F (-17.7°C). Always use oldest stock first. Do not store near food, foodstuffs, drugs or potable water supplies.

| 11 9 | TIONAL EXPOSURE I | LIMITS Level (WEEL) Guides | |
|---|--|-------------------------------|----------------------|
| 0.5 | Components | | Value |
| | Urea (CAS: 57-13-6) | TWA | 10 mg/m ³ |
| Biologica | al limit values | | |
| | | al Exposure Indices | |
| | Components No listings | Value | Specimen |
| Pro mis Ind Eye Skir | EXPOSURE CONTROLS: Engineering Measures Provide adequate general and local exhaust ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of variants. 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 contaminants. The use of chemical-resistant gloves is recommended when handling undiluted product. that the liquid may penetrate the gloves. Frequent change is advisable. Respiratory Protection : In case of inadequate ventilation or risk of inhalation of vargers, use suitable respiratory equipment. We protection during operations where spraying or misting occurs. In the U.S.A., if respirators are used, a phould be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection star supplied respiratory protection if exposure concentrations are unknown. | | |

9. PHYSICAL AND CHEMICAL PROPERTIES

| 9.1 | APPEARANCE : | Clear, colorless liquid |
|-------|-----------------------------|---|
| | ODOR: | Slight. |
| | ODOR THRESHOLD: | 0.1 ppm. |
| | COLOR : | Clear. |
| | pH : | No data available. |
| | MELTING POINT / FREEZING | G POINT : No data available |
| | BOILING POINT : | No data available |
| | FLASH POINT : | Does not flash |
| | FLAMMABILILITY (solid, gas) | : Does not support combustion. |
| | UPPER / LOWER FLAMMABI | LITY OR EXPLOSIVE LIMITS : Not applicable. |
| | VAPOR PRESSURE : | No data available. |
| | SOLUBILITY: | Soluble |
| | PARTITION CO-EFFICIENT, r | n-OCTANOL / WATER : No data. |
| | AUTO-IGNITION TEMPERAT | JRE : No data available. |
| | DECOMPOSITION TEMPERA | TURE : Not determined |
| | VISCOSITY : | Not determined |
| | SPECIFIC GRAVITY (Water = | 1): 1.294 g/ml |
| | BULK DENSITY: | 10.80 lbs/gal. / 1.29 kg/L |
| Note: | These physical data are ty | pical values based on material tested but may vary from s |

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

Excessive heat. Contact with alkalis, oxidizing and reducing agents, hypochlorites, aldehydes, inorganic acids, organics, cyanides, and copper. Avoid containers, piping, or fittings made of brass, bronze or other copper-containing alloys, or galvanized metal.

10.5 INCOMPATIBILE MATERIALS

None known.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: oxides of carbon, oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

11.1 LIKELY ROUTES OF EXPOSURE

Skin contact, eye contact. LC₅₀ (rat): No data available. LD₅₀ Oral (rat): 8,471 mg/kg (Urea) LD₅₀ Dermal (rat): No data available (Urea) LD₅₀ Oral (rat): 3,250 mg/kg (Potassium Acetate) LD₅₀ Dermal (rat): No data available (Potassium Acetate) 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 | |
|------------------------|-------------------------------------|-----------------|--------------|--|
| Urea (CAS: 57-13 | 3-6) | | | |
| Aquatic | | | | |
| Material is toxic to | o fish and other aquatic organisms | | | |
| Potassium Aceta | te (CAS: 127-08-2) | | | |
| Aquatic | | | | |
| Material is toxic to | o fish and other aquatic organisms | | | |
| Drift or runoff may ac | versely affect non-target plants. | | | |
| Do not apply directly | to water. | | | |
| Do not contaminate | water when disposing of equipme | ent wash water. | | |
| Do not apply when w | reather conditions favor drift from | target area. | | |
| 12.2 PERSISTENCE AN | D DEGRADABILITY | | | |
| Biodegradability: | The product is not readily bio | degradable | | |
| 12.3 BIOACCUMULATI | E POTENTIAL | | | |
| Bioaccumulation: | No data available. | | | |
| 12.4 MOBILITY IN SOIL | | | | |
| This product is wate | r coluble and may disperse in esi | | | |

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 containers for any purpose. Container is recyclable, and is to be disposed of at a container collection site. Contact your local dealer/distributor for the location of the nearest collection site. Before taking container to the collection site: Triple or pressure-rinse the empty container, adding the rinsate to the spray tank. Make the empty container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. 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 | | HMIS | |
| | 1 Health 0 Flammability 1 Instability | 0 Least 1 Slight 2 Moderate 3 High 4 Severe | 1 Health 0 Flammability 1 Reactivity B PPE | |
| SARA Hazard Notification/Reporting SARA Title III Hazard Category: | Immediate <u>Y</u> Delayed <u>N</u> | | NSudden Release of Pressure <u>N</u> | |
| 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

MSDS STATUS: All sections revised; format change **PREPARED BY:** Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

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