SDS NUMBER: 1000592562-14-LPI SDS REVISIONS: NEW DATE OF ISSUE: 08/21/14

BLACKJACKTM CA

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: BLACKJACK™ CA 7% CALCIUM 5-0-0

1.2 RECOMMENDED USE: LIQUID SECONDARY NUTRIENT

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 IrritationCategory 2BH320Acute Toxicity (Dermal)Category 5H313Acute Toxicity (Oral)Category 5H302

2.2 Label elements



Signal word: WARNING

Hazard Statement: H320 – Causes eye irritation.

H313 - May be harmful in contact with skin.

H302 - Harmful if swallowed

Precautionary

Statement: P261 – Avoid breathing dust / fume / gas / mist / vapors / spray

P273 - Avoid release to the environment

(Prevention): P280 - Wear protective gloves and eye / face protection Precautionary P337 + P313 - If eye irritation persists: get medical attention

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

(Response): continue rinsing eyes.

P302 + P352 – IF ON SKIN: Wash with plenty of water for 15 to 20 minutes

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

KEEP OUT OF REACH OF CHILDREN -

Appearance and odor: Black liquid with no odor.

WARNING - CATEGORY 2B CAUSES EYE IRRITATION, CATEGORY 5 MAY BE HARMFUL IN CONTACT WITH SKIN, CATEGORY 5 HARMFUL IF SWALLOWED

Potential Health effects

Routes of exposure Eye contact, skin contact, inhalation. Avoid breathing spray mist.

Eyes Causes 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 Eyes. Skin. Inhalation.

Signs and symptoms May be harmful if swallowed, absorbed through skin or inhaled.

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.

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3. COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

Classification according to 29 CFR 1910.1200

3.2 Mixtures

Chemical Name: CAS No. Classification Concentration

[%] varies

Calcium Nitrate* 15245-12-2 (*Hydrated Ammonium Calcium Nitrate Double Salt)

Vater 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

H320, 2B, Eye irritation.

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.

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 nitrogen and some metallic oxides 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.

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.

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7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling:

Avoid inhalation of dusts, vapors / spray and contact with eyes, skin and clothing. Do not breathe dusts, 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:

Store above 40° F (4.4° C). 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. 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 (AIHA) WEELs

Components Type Value

No listings TWA

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 APPEARANCE : Liquid

ODOR: None.

ODOR THRESHOLD: No data available. COLOR: No data available.

pH: Black.
pH: 10.2 – 10.3

MELTING POINT / FREEZING POINT: No data available BOILING POINT: No data available No data available FLASH POINT: S212°F / 100°C (Tag CC)

FLAMMABILILITY (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: 75 cP @ 68 $^{\circ}F$ SPECIFIC GRAVITY (Water = 1): 1.378 g/ml

BULK DENSITY: 11.50 lbs./gal / 1.38 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.

 BLACKJACKTM CA SUPERSEDES: NEW

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 INCOMPATIBILE MATERIALS

None known

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

11.1 LIKELY ROUTES OF EXPOSURE

Eye contact, skin contact. **LC**₅₀ (rat) No data available

LD₅₀ Oral (rat): >2,100 mg/kg (Calcium Nitrate)

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. This product is not intended for use in aquatic settings.

Ecotoxicological Data

Components Species Test Results

Calcium Nitrate (CAS: 15245-12-2)

Aquatic

Fish LC_{50} Not available >100 mg/l, 96 hours

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: No bioaccumulation phenomena noted.

12.4 MOBILITY IN SOIL

No data available.

12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

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13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

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.

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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;

HMIS

CLASS 70)

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

NFPA

Health 0 Health Least Flammability Slight 0 Flammability 0 Instability 2 Moderate n Reactivity 3 High В PPE Severe SARA Hazard Notification/Reporting SARA Title III Hazard Category: **Immediate** Fire Sudden Release of Pressure __N_ Delayed Reactive

Reportable Quantity (RQ) under U.S. CERCLA: Not listed.

SARA, Title III, Section 313: Not listed RCRA Waste Code: Not listed CA Proposition 65: Not applicable

16. OTHER INFORMATION

SDS STATUS: New

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EPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

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