



SAFETY DATA SHEET

8-8-2 ACTIVATOR - SPREADER

SDS NUMBER: 1000296956-16b-LPI

SDS REVISIONS: SEC. 2

DATE OF ISSUE: 06/30/16

SUPERSEDES: 02/12/16

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: 8-8-2

1.2 RECOMMENDED USE:

BIO-DEGRADABLE ACTIVATOR – SPREADER FOR AGRICULTURAL SPRAYS

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 - **Product Information:** 1-888-574-2878 (LPI-CUST)
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

Skin Corrosion/Irritation	Category 1B	H314
Eye Damage/Irritation	Category 1	H318
Toxicity to Reproduction	Category 2	H361
Environmental Hazards	Category 2	H401
Environmental Hazards	Category 3	H412

2.2 Label elements



Signal word: DANGER

Hazard Statement: H314 – Causes severe skin burns and eye damage.
H318 – Causes serious eye damage.
H361 – Suspected of damaging fertility or the unborn child.
H401 – Toxic to aquatic life.
H412 – Harmful to aquatic life with long lasting effects.

Precautionary Statement: (Prevention): P201 – Obtain special instructions before use.
P202 – Do not handle until all safety precautions have been read and understood.
P260 – Do not breathe dust/fume/gas/mist/vapors/spray.
P264 – Wash hands and face thoroughly after handling.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statement: (Response): P301+P330+P331 – IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363 – Wash contaminated clothing before reuse.
P304+P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310 – Immediately call a POISON CENTER/doctor/physician.
P321 – Specific treatment (see First Aid statements on the product label).
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P308+P313 – If exposed or concerned: Get medical advice/attention.

Precautionary Statement: (Storage): P405 – Store locked up.

Precautionary Statement: (Disposal): P501 – Dispose of contents/container in accordance with local/state/national regulations.



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2.3 Other hazards
None known

3. COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

3.2 Mixtures

Classification according to 29 CFR 1910.1200

Chemical Name:	CAS No.	Concentration [%]
Phosphoric Acid	7664-38-2	10 - < 20*
Urea	57-13-6	10 - < 20*
Nonylphenol polyethylene glycol ether	127087-87-0	1 - < 3
Zinc Sulfate	7733-02-2	1 - < 3
Other components below reportable levels		60 - < 70

*Designates that a specific chemical identity and /or percentage of the composition has been withheld as a trade secret.

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice: Get medical attention if symptoms occur.

- 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.
- 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.
- 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.
- 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.

4.2 Most Important Symptoms and Effects, Acute and Delayed

Symptoms: No adverse symptoms or effects are anticipated under normal handling conditions. See section 2 for further information.
Inhalation: May cause respiratory irritation.
Eyes: Causes serious eye damage.
Skin: Causes severe skin burns and eye damage.
Ingestion: 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: Probable mucosal damage may contraindicate the use of gastric lavage. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.



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5. FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

Suitable Extinguishing Media: Dry chemical, carbon dioxide (CO₂), alcohol foam, foam, water spray or fog. 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: Combustion may yield smoke, carbon monoxide, and other products from incomplete combustion. Oxides of sulfur, nitrogen or phosphorus may also be formed. Keep only in original container. Do not breathe mists/vapors/spray.

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: Keep all sources of ignition away from spill/release. 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 mists, vapors / spray and contact with eyes, skin and clothing. Do not breathe mists 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 in cool, dry place. Store in original container. Keep tightly closed. Do not reuse empty container. Product will become thicker at cold temperatures but effectiveness will not be affected. Warm product before use. 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
Phosphoric Acid	TWA	1 mg/m ³
	STEL	3 mg/m ³

U.S. Workplace Exposure Level (OSHA) PELs

Components	Type	Value
Phosphoric Acid	TWA	1 mg/m ³

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Specimen
No listings		



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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:

Coveralls worn over long-sleeved shirt and long pants. Chemical-resistant gloves. Chemical-resistant footwear plus socks.

Respiratory Protection:

In case of inadequate ventilation or risk of inhalation of mists 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:	Phosphoric acid-like; slightly soap.
ODOR THRESHOLD:	No data available.
COLOR:	Clear amber.
pH:	1.8
MELTING POINT / FREEZING POINT:	No data available
BOILING POINT:	210 °F (98.9 °C)
FLASH POINT:	No data available.
FLAMMABILITY (solid, gas):	No data available.
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:	No data available.
VAPOR PRESSURE:	0.00001 hPa (estimated).
SOLUBILITY:	Miscible
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):	1.17 g/ml
DENSITY:	9.80 lbs./gal / 1.17 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

Reacts violently with strong alkaline substances. This product may react with reducing agents.

10.2 CHEMICAL STABILITY

Stable under normal temperature and use conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

None expected under normal use conditions. Will not polymerize

10.4 CONDITIONS TO AVOID

Do not mix with other chemicals. Contact with incompatible materials.

10.5 INCOMPATIBLE MATERIALS

Bases, reducing agents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

None known.



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11 TOXICOLOGICAL INFORMATION

11.3 LIKELY ROUTES OF EXPOSURE

Eye contact: Causes serious eye damage.

Skin contact: Causes skin burns.

Inhalation: Prolonged inhalation may be harmful. May cause irritation to the respiratory system.

Ingestion: Causes digestive tract burns.

LC₅₀ (rat): No data available

LD₅₀ Oral (rat): >6,000 mg/kg (estimated)

LD₅₀ Dermal (rat): >24,000 mg/kg (estimated)

Acute Toxicity Estimates: Harmful if swallowed.

Skin Irritation (rabbit): Causes severe skin burns and eye damage.

Eye Irritation (rabbit): Causes serious eye damage.

Specific Target Organ Toxicity: No data available.

Aspiration: No data available.

Skin Sensitization (guinea pig): Not a sensitizer

Carcinogenicity: No data available

Germ Cell Mutagenicity: No data available

Reproductive Toxicity: Suspected of damaging fertility or the unborn child.

Chronic Effects: Prolonged inhalation may be harmful.

Interactive Effects: None known.

12 ECOLOGICAL INFORMATION

12.3 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	Species	Test Results
Product	Fish	4,111 mg/L - 96-hour LC50 (estimated)
	Daphnia Magna	4,388 mg/L - 48-hour EC50 (estimated)

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 data available.

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

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

14.3 LAND TRANSPORT

DOT Shipping Description: UN1760, CORROSIVE LIQUID, N.O.S. (PHOSPHORIC ACID), 8, II ERG GUIDE 154

U.S. Surface Freight Classification: ADHESIVES, ADJUVANTS, SPREADERS OR STICKERS (NMFC 4610; CLASS 60)

15 REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

NFPA & HMIS Hazard Ratings:

NFPA

HMIS

3 Health	0 Least	3 Health
0 Flammability	1 Slight	0 Flammability
0 Instability	2 Moderate	0 Reactivity
	3 High	B PPE
	4 Severe	

SARA Hazard Notification/Reporting

SARA Title III Hazard Category: Immediate Y Fire N Sudden Release of Pressure N
 Delayed N Reactive N

Reportable Quantity (RQ) under U.S. CERCLA: Phosphoric Acid (CAS: 7664-38-2) 5,000 lbs.; Zinc Sulfate (CAS: 7733-02-0) 1,000 lbs. .

SARA, Title III, Section 313: Zinc 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: Section 2 revised.

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

CA REG. NO.: 34704-50089

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