MATERIAL SAFETY DATA SHEET

GUNSMOKE™

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

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

FORMULATED FOR:
LOVELAND PRODUCTS, INC.
P.O. Box 1286 • Greeley, CO 80632-1286

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

PRODUCT NAME: GUNSMOKE™ WATER CONDITIONING AGENT
CHEMICAL NAME: Mixture
CHEMICAL FAMILY: Water Conditioning Agent
MSDS Number: 8112310-10b-LPI
MSDS Revisions: Section 14
Date of Issue: 03/22/10
Supersedes: 01/22/10

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN - DANGER - Causes irreversible eye damage. Do not get in eyes, on skin, or on clothing. Wear protective eyewear such as goggles. Harmful if swallowed, absorbed through the skin, or inhaled. Thoroughly wash exposed areas of skin after use. Flush with clean water for at least 30 minutes. Seek medical attention.

This product is a clear, golden yellow liquid with slight pleasant odor. Primary routes of entry are eye contact and skin contact.

3. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical ingredients: Percentage by Weight: CAS No. TLV (Units)
Monocarbamide dihydrogen sulphate, 80.00 Mixture none established
Trihydroxy propanec:lol,
Alkyl amine alkoxylate 20.00
Other ingredients

4. FIRST AID MEASURES

If in eyes: 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.

If swallowed: 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-888-944-8565.

5. FIRE FIGHTING MEASURES

FLASH POINT (*F/Test Method): Does not flash; not applicable
FLAMMABLE LIMITS (LFL & UFL): Not applicable
EXTINGUISHING MEDIA: Dry chemical, carbon dioxide (CO₂), foam, water spray or fog.
HAZARDOUS COMBUSTION PRODUCTS: May include but are not limited to oxides of nitrogen and oxides of sulfur.
SPECIAL FIRE FIGHTING PROCEDURES: Use water spray to cool containers exposed to fire. Remain upwind. Avoid breathing smoke. Wear self-contained breathing apparatus and full protective gear.
UNUSUAL FIRE AND EXPLOSION HAZARDS: None known

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
Avoid breathing vapors and contact with liquid. Collect as much liquid as possible in a clean container for reuse or absorb and sweep up immediately and transfer to suitable containers for disposal. Flush spill area with water after clean up. Check local, state and federal regulations for proper disposal.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

HANDLING: Wear goggles or face shield and chemical-resistant gloves when handling.

STORAGE: Keep container tightly closed. Store above 20°F. Store in original container. Do not store in aluminum, copper, zinc, or mild steel containers. Do not allow water or other chemicals to be introduced into container. Do not use near heat or open flame. Do not reuse empty container. Do not contaminate water, food or feed by storage or disposal.
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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Work in well-ventilated area, local exhaust may be required if working in confined space.

RESPIRATORY PROTECTION: Not normally required, if vapors exceed acceptable levels, wear a NIOSH/MSHA approved respirator.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, shoes plus socks, and rubber or chemical-resistant gloves.

Personal Protection Equipment: Applicators and other handlers must wear: long-sleeved shirt and pants, shoes plus socks, rubber gloves, and protective eyewear. Respiratory protection is not normally required but if vapor levels are not acceptable, wear a MSHA/NIOSH approved respirator.

For product

OSHA PEL 8 hr TWA
none established

ACGIH TLV-TWA
none established

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear, golden yellow liquid with slight pleasant odor

SOLUBILITY: Soluble

SPECIFIC GRAVITY (Water = 1): 1.22g/ml

BULK DENSITY: 10.18 lbs/gal.

PH: 2.0 - 2.5 (0.5% solution)

VAPOR PRESSURE: Not established

BOILING POINT: Not established

PERCENT VOLATILE (by volume): Not established

EVAPORATION RATE: Not established

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

STABILITY: Stable

CONDITIONS TO AVOID: None known.

INCOMPATIBILITY: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen, oxides of sulfur, and other unknown hazardous materials may be formed in a fire situation.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (female rat): > 2000 mg/kg

Acute Dermal LD₅₀ (rat): > 2000 mg/kg

Eye Irritation (rabbit): Extremely irritating

Skin Irritation (rabbit): Slightly irritating

Inhalation LC₅₀ (rat): May cause respiratory tract irritation.

Skin Sensitization (guinea pig): not established

Carcinogenic Potential: None listed in OSHA, NTP, IARC or ACGIH

12. ECOLOGICAL INFORMATION

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

13. DISPOSAL CONSIDERATIONS

Do not reuse containers. 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 container 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 a 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 storage or disposal.

14. TRANSPORT INFORMATION

DOT Shipping Description: DOT CORROSIVE TO MILD STEEL. NOT REGULATED WHEN TRANSPORTED BY MOTOR VEHICLE OR RAILCAR IN PACKAGING THAT WILL NOT REACT WITH OR BE DEGRADED BY THIS MATERIAL - 49 CFR 173.154 (d).

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

Consult appropriate ICAO/ICAO and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.
### 15. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>NFPA &amp; HMIS Hazard Ratings:</th>
<th>NFPA</th>
<th>HMIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
<td>Slight</td>
</tr>
<tr>
<td>Instability</td>
<td>2</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Severe</td>
</tr>
</tbody>
</table>

**NFPA & HMIS Hazard Ratings:**
- 3 Health
- 1 Slight
- 2 Moderate
- 3 High
- 4 Severe

**SARA Hazard Notification/Reporting**

<table>
<thead>
<tr>
<th>SARA Title III Hazard Category:</th>
<th>Immediate Fire</th>
<th>Delayed Fire</th>
<th>Sudden Release of Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Delayed</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Reactive</td>
<td>N</td>
<td>N</td>
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**Reportable Quantity (RQ) under U.S. CERCLA:** Not listed

**SARA, Title III, Section 313:** Not listed

**RCRA Waste Code:** Not listed

**CA Proposition 65:** None listed

### 16. OTHER INFORMATION

**MSDS STATUS:** Section 14 revised

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental/Regulatory Services

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*Gunsmoke is a trademark of Loveland Products, Inc.*

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