

MATERIAL SAFETY DATA SHEET

MSMA 6 PLUS

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: 1-800-301-7976
U.S. Coast Guard National Response Center: 1-800-424-8802

PRODUCT NAME: MSMA 6 PLUS
CHEMICAL NAME: MSMA: Monosodium Acid Methanearsonate
CHEMICAL FAMILY: Organic Arsenical
EPA REG. NO.: 34704-115
MSDS Number: 000115-04b-LPI **MSDS Revisions:** See section 16 **Date Of Issue:** 07/08/04 **Supersedes:** 02/26/04

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN - CAUTION – Harmful if swallowed. Avoid contact with skin. Avoid contact with eyes. Avoid breathing spray mist. Flagmen should be fully protected during spray operations or mechanical flagmen used.

This product is a clear, light yellow aqueous solution with virtually no odor. Primary routes of entry are Inhalation, eye contact and skin contact.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Monosodium Acid Methanearsonate	48.32	2163-80-6	0.5 mg/m ³ (Arsenic)
Inert Ingredients	51.68		

4. FIRST AID MEASURES

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 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 on skin or clothing: 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.

if inhaled: Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: **1-800-301-7976**. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): Not applicable; does not flash
FLAMMABLE LIMITS (LFL & UFL): Not applicable
EXTINGUISHING MEDIA: Dry chemical or CO₂ are recommended for fighting fires where MSMA is present.
HAZARDOUS COMBUSTION PRODUCTS: May include but are not limited to oxides of carbon or formation of hazardous compounds.
SPECIAL FIRE FIGHTING PROCEDURES: Use of water or foam is discouraged to prevent spreading of material. SCBA equipment and full protective clothing should be worn where MSMA is present confined areas in a fire situation.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Noxious fumes may be emitted under fire conditions.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Contain spill. Absorb with clay or other absorbent and transfer to suitable containers for possible land application according to label use or for disposal. 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: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this. Product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Store in a safe manner in a cool, dry place away from children, domestic animals, food and feed products, seed and fertilizer. Store in original container only. Keep container tightly closed when not in use. Do not contaminate water, food or feed by storage or disposal.

Personal Protective Equipment: Applicators and other handlers (other than mixers and loaders) must wear: long sleeved shirt and long pants, chemical-resistant gloves made of waterproof materials such as butyl rubber \geq 14 mils, natural rubber \geq mils, neoprene rubber \geq 14 mils, or nitrile rubber \geq 14 mils and chemical-resistant footwear plus socks. For exposures in enclosed areas, a respirator with either an organic vapor-removing cartridge with prefilter approved for pesticides (NIOSH approval number prefix TC-23C, or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) or a NIOSH approved respirator with any P or HE filter. For exposures outdoors, a NIOSH approved respirator with any P or HE filter. Respirator wearers are required to be fit tested and trained in the use, care and limitations of the respirator. **Mixers and loaders must wear:** long sleeved shirt and long pants, waterproof gloves and chemical-resistant footwear plus socks, protective eyewear and chemical-resistant apron when mixing or loading. For exposures in enclosed areas, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number TC-14G) or a NIOSH approved respirator with an organic vapor (OV) cartridge or a canister with any P or HE prefilter. For exposures outdoors, a NIOSH approved with any P or HE filter. Respirator wearers are required to be fit tested and trained in the use, care and limitations of the respirator. Follow manufacturer's instructions for cleaning and maintaining PPE. If no instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

RESPIRATORY PROTECTION: Not normally required, if vapors or dusts exceed acceptable levels, wear a NIOSH approved pesticide respirator.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

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

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
Arsenic & inorganic compounds	0.5 mg/m ³ (organic compounds)	0.01 mg/m ³ (inorganic compounds)

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear, light yellow aqueous solution with virtually no odor.

SPECIFIC GRAVITY (Water = 1): 1.51 g/ml

VAPOR PRESSURE: Not established

PERCENT VOLATILE (by volume): 45%

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.

BULK DENSITY: 12.60 lbs/gal.

BOILING POINT: 100°C/212°F

EVAPORATION RATE: Not available

SOLUBILITY: Miscible

pH: 5.5-6.0

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat.

INCOMPATIBILITY: Acids and metals (such as Zinc, Aluminum, Copper, Tin, etc.).

HAZARDOUS DECOMPOSITION PRODUCTS: In the presence of acids and metals, MSMA can form Arsine gas, a highly poisonous, colorless, non-irritating gas with a mild garlic-like odor.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): 1738 mg/kg

Eye Irritation (rabbit): Mildly irritating

Inhalation LC₅₀ (rat): 2.2 mg/L (4 hr.)

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

Acute Dermal LD₅₀ (rabbit): >2000 mg/kg

Skin Irritation (rabbit): Mildly irritating

Skin Sensitization (guinea pig): Not established

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 by cleaning of equipment or disposal of wastes.

13. DISPOSAL CONSIDERATIONS

Do not reuse container. **Metal:** Triple rinse (or equivalent), then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by local, state and federal authorities. **Plastic:** Triple rinse (or equivalent), then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORT INFORMATION

DOT Shipping Description: NOT REGULATED BY USDOT.

U.S. Surface Freight Classification: COMPOUND, TREE OR WEED KILLING, NOI (NMFC 50320, SUB 2: CLASS 60)

Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:

NFPA		HMIS
1 Health	0 Least	1 Health
0 Flammability	1 Slight	0 Flammability
0 Instability	2 Moderate	0 Reactivity
	3 High	H PPE
	4 Severe	

SARA Hazard Notification/Reporting

SARA Title III Hazard Category:

Immediate	<u>Y</u>	Fire	<u>N</u>	Sudden Release of Pressure	<u>N</u>
Delayed	<u>N</u>	Reactive	<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: Not listed

16. OTHER INFORMATION

MSDS STATUS: Format modified to address changes in ANSI Standard Z400.1-2004

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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