

## MATERIAL SAFETY DATA SHEET

WINFIELD SOLUTIONS, LLC

**PRODUCT NAME(S)**For Emergency Call: 800-228-5635 or  
Chem Trec: 800-424-9300**912 HERBICIDE**

Effective Date: 09/18/07

**I. IDENTIFICATION****CHEMICAL NAME OF PRIMARY COMPONENT(S):** Monosodium Acid Methanearsonate**FORMULA:** CH<sub>4</sub>AsNaO<sub>3</sub>**MOLECULAR WEIGHT:** 162.0**SYNONYMS:** MSMA**CAS # & NAME:** 2163-80-6 MSMA**EPA Reg No.** 9779-133**II. INGREDIENTS/SUMMARY OF HAZARDS**

(H)/INGREDIENT(S)	CAS NUMBER	OSHA HAZARD NON-HAZARD (NH)	PERCENT
Monosodium Acid Methanearsonate	2163-80-6	H	48.00%
Formulation aids		NH	52.00%

	NFPA <sup>1/</sup>	HMIS <sup>2/</sup>
HEALTH	2	2
FIRE	0	0
REACTIVITY	0	0

1/ National Fire Protection Association Rating

2/ Hazardous Materials Identification System

(4 = Extreme/Severe 3 = High/Serious 2 = Moderate 1 = Slight 0 = Minimum)

**SARA TITLE III HAZARD CLASSIFICATION**

IMMEDIATE (ACUTE) HEALTH	Yes
DELAYED (CHRONIC) HEALTH	Yes
FIRE	No
SUDDEN RELEASE OF PRESSURE	No
REACTIVE	No

**III. PHYSICAL DATA**

**SPECIFIC GRAVITY:** 1.508  
**BOILING POINT:** <100°C  
**FREEZING POINT:** Not determined  
**VAPOR PRESSURE:** Not determined  
**SOLUBILITY IN WATER:** Miscible  
**APPEARANCE:** Light yellow to clear  
**ODOR:** Odorless

**IV. FIRE AND EXPLOSION HAZARD DATA**

**FLASH POINT:** Not applicable  
**FLAMMABLE LIMITS IN AIR:** Not determined  
**AUTOIGNITION TEMPERATURE:** Not determined  
**EXTINGUISHING MEDIA:** Use carbon dioxide or dry chemical for small fires and water fog or foam (alcohol, polymer or ordinary) for large fires. Water stream may spread flames.  
**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Noxious fumes may be emitted under fire conditions.  
**SPECIAL FIRE FIGHTING PROCEDURES:** Fire fighters should use self contained breathing apparatus and full turnout gear. Prevent runoff of fire water. Avoid exposure to smoke.

**V. REACTIVITY DATA**

**STABILITY:** Stable under normal conditions.  
**CONDITIONS TO AVOID:** Freezing conditions.  
**MATERIALS TO AVOID:** Aluminium and galvanized storage or spray equipment.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Noxious fumes may be emitted under fire conditions.  
**HAZARDOUS POLYMERIZATION:** Will not occur.

**VI. HEALTH HAZARD DATA/FIRST AID PROCEDURES****TOXICOLOGY DATA:**

**Acute Oral LD<sub>50</sub> (rat):** 1.7 g/Kg  
**Acute Dermal LD<sub>50</sub> (rabbit):** 2.5 g/Kg  
**Acute Inhalation (4 hour):** > 20.8 mg/L (nominal, rat)  
**Eye Irritation (rabbit):** Not a primary irritant  
**Dermal Irritation (rabbit):** Slight irritant  
**Dermal Sensitization:** Not expected to cause sensitization

**EXPOSURE LIMITS:**

CHEMICAL NAME(S)	ACGIH (TLV)	OSHA (TWA)
MSMA (Arsenic)	0.2 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>

**CARCINOGENICITY, TERATOGENICITY, MUTAGENICITY:** Not listed as a carcinogen by NRC or OSHA. Listed as a carcinogen by IARC.

**SIGNS OF POISONING:** Abdominal pain, headache, vomiting, diarrhea

**PRIMARY ROUTES OF ENTRY:** Ingestion

**EFFECTS OF SINGLE OVEREXPOSURE:**

**Swallowing:** May be harmful if swallowed. Symptoms of arsenic poisoning include colic, burning abdominal pain, vomiting, and watery or bloody diarrhea. Repeated intakes less than those necessary to produce severe acute symptoms are known to cause chronic headache, abdominal distress, salivation, low-grade fever, and persistent symptoms of upper respiratory irritation. Stomatitis and garlicky breath are characteristic.

**Skin Absorption:** Prolonged or repeated exposure may cause irritation.

**Inhalation:** Prolonged or repeated exposure to mists or vapors may cause respiratory tract irritation.

**EFFECTS OF REPEATED OVEREXPOSURE:** Repeated overexposure may cause local irritation of the skin, eyes or respiratory tract.

**OTHER EFFECTS OF OVEREXPOSURE:** Chronic arsenic poisoning. Prolonged low intakes of arsenic causes peripheral neuropathy (paresthesiae, pain, anesthesia, paresis, ataxia), encephalopathy (apathy, disorientation), dermatologic disorders (keratoses, pigmentation, eczema, brittle nails, loss of hair), toxic hepatitis, (hepatomegaly, sometimes progressing to cirrhosis with ascites), and bone marrow injury (anemia, leukopenia, weakness). Local edema, frequently of the eyelids, characterizes some poisonings.

**EXISTING MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:** Exposure to skin may aggravate preexisting skin conditions. Exposure to mists may aggravate preexisting respiratory conditions.

**EMERGENCY AND FIRST AID PROCEDURES:**

**Swallowing:** Call physician or poison control center. If patient is alert and not convulsing give 1 - 2 glasses of water and induce vomiting by tickling the back of the throat or administering syrup of ipecac. Do not induce vomiting or give anything by mouth to an unconscious person.

**Skin:** Wash affected area with plenty of soap and water. Remove contaminated clothing. Launder contaminated clothing separately. Get medical attention if irritation develops and persists.

**Inhalation:** Remove victim to fresh air. If not breathing, administer artificial respiration. GET MEDICAL ATTENTION.

**Eyes:** Hold eyelids open and flush with a steady stream of water for at least 15 minutes. GET MEDICAL ATTENTION.

**NOTE TO PHYSICIAN:** If ingested, gastric lavage may be required.

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**VII. PRECAUTIONS FOR SAFE HANDLING AND USE**


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**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:**

Dike the area using absorbent or materials such as sand or clay. Recover and contain as much product as possible using absorbent. Clean spill area using a solution of water and detergent. Collect and contain wash water and all contaminated absorbent for disposal. If spilled on the ground, the affected area should be excavated to a depth of 1 - 2 inches. Prevent the spilled product or washings from reaching public sewers or waterways. Wear appropriate protective equipment during the cleanup. Ensure that tools and equipment are adequately decontaminated.

**WASTE DISPOSAL METHOD:** Dispose of in accordance with federal, state and local regulations.

**CONTAINER DISPOSAL:** Dispose of in an approved facility according to federal, state and local regulations.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** Store in a cool, dry, secure area.

## VIII. SPECIAL PROTECTION INFORMATION

### PROTECTIVE EQUIPMENT SHOULD BE USED DURING THE FOLLOWING PROCEDURES:

- Manufacture or formulation of this product.
- Repair and maintenance of contaminated equipment.
- Clean up of leaks and spills.
- Any other activity that may result in hazardous exposures.
- Refer to product label for PPE required for labeled use.

**RESPIRATORY PROTECTION:** Use NIOSH/MSHA approved respirator for organic vapors. Use positive pressure contained breathing apparatus where emergency conditions or where exposure limits are exceeded.

**VENTILATION:** Local exhaust

**PROTECTIVE CLOTHING:** Chemical resistant gloves, coveralls, apron and foot coverings.

**EYE PROTECTION:** Chemical goggles with face shield where splash hazard exists.

**USER SAFETY RECOMMENDATIONS:** Safety showers and eye wash should be easily accessible.

## IX. REGULATORY STATUS

**TSCA INVENTORY STATUS:**

**TRANSPORTATION STATUS:**

**DOT INFORMATION:** Not Regulated

Container Capacity	Proper Shipping Name	Hazard Class	Label	Packing Group

### SARA TITLE III

**Section 302-304 (40 CFR 350):** Not given

**Extremely Hazardous Substance (EHS):** No ingredients listed

**Section 312, Reporting (40 CFR 370):**

**SARA/OSHA Hazardous Chemical Reporting Quantity:** 10,000 lbs.

**Section 313, Toxic Chemicals:** Arsenic and arsenic compounds.

**Reportable Quantity (RQ):** Not listed

**RCRA HAZARDOUS WASTE:** Arsenic D004

**International Right-To-Know Regulations:**

## X. REFERENCES

- 1) Supplier sponsored studies.

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