

Safety Data Sheet



1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Arena MSMA Herbicide**

Recommended Use of the Chemical Herbicide for the control of certain weeds in cotton, sugarcane, turf and non-crop areas.
and Restrictions on Use

Supplier: Agricrop Pty Ltd
ABN: 84 100 473 309
Street Address: 255 Port Road, Hindmarsh SA 5007

Telephone Number: 07 3348 4113 (office hours)
Facsimile: 07 3348 2702
Emergency Telephone: **1800 033 111 (24 hours)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; **NON-DANGEROUS GOODS.**

This material is hazardous according to Safe Work Australia; **HAZARDOUS CHEMICAL.**

Classification of the chemical:

Acute Oral Toxicity - Category 4

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

Skin corrosion/irritation - Category 3

Eye damage/irritation - Category 2B

Acute Aquatic Toxicity - Category 3

Chronic Aquatic Toxicity - Category 3



SIGNAL WORD: WARNING

Hazard Statement(s):

H302 Harmful if swallowed.

Precautionary Statement(s):

Prevention:

P102 Keep out of reach of children.

P103 Read label before use.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

Response:

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330 Rinse mouth.

Storage:

No storage statements.

Product Name: **Arena MSMA Herbicide**
Substance No: **000000063003**

Issued: 15/11/2016
Version: 1

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**Disposal:**

P501 Dispose of contents and container in accordance with local, regional, national, international regulations.

Poisons Schedule (SUSMP): S7 Dangerous Poison.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Monosodium methyl arsonate	2163-80-6	72% w/v	H302 H316 H320 H411
Other component(s)	-	to 100%	-

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor at once.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin Contact:

If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

Eye Contact:

If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Ingestion:

Rinse mouth with water. If swallowed, DO NOT Induce vomiting, seek immediate medical attention and contact the Poisons Information Centre on 131126. If vomiting occurs, make every effort to prevent vomit from entering lungs by careful placement of patient. Lean patient forward or place on left side (head down position if possible) to maintain open airway and prevent aspiration. Never give anything by the mouth to a semi-conscious or unconscious patient. Seek immediate medical assistance. Observe patient carefully.

Indication of immediate medical attention and special treatment needed:

Do not use BAL as antidote. Suspected ingestion can be confirmed by urine analysis for arsenic residue. A value above 0.6 ppm arsenic is indicative of acute poisoning. If arsenical pesticide has been ingested within a few hours of treatment, empty the stomach by intubation, aspiration and lavage. Administer activated charcoal. Administer intravenous fluids to restore hydration, support urine flow and correct electrolyte imbalances.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Not combustible, however, if material is involved in a fire use: Extinguishing media appropriate to surrounding fire conditions.

Specific hazards arising from the chemical:

Non-combustible material. Decomposes on heating emitting toxic fumes including those of oxides of arsenic.

Special protective equipment and precautions for fire-fighters:

Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition. Prevent run off of fire water to avoid contaminating waterways.

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6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:

Clear area of all unprotected personnel. Do not allow container or product to get into drains, sewers, streams or ponds. If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Slippery when spilt. Avoid accidents, clean up immediately. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect in properly labelled containers, with loose fitting lids, for disposal.

7. HANDLING AND STORAGE

This material is a Scheduled Poison S7 and must be stored, maintained and used in accordance with the relevant regulations.

Precautions for safe handling:

Avoid skin and eye contact and breathing in vapour, mists and aerosols. When using do not eat, drink or smoke. Keep out of reach of children. Wash hands thoroughly after handling. Use product according to label directions.

Conditions for safe storage, including any incompatibilities:

Store in the closed, original container in a locked, well-ventilated room or place, as cool as possible and away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Arsenic & soluble compounds (as As): 8hr TWA = 0.05 mg/m³, refer to Note (g)

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

Notes (a) to (o) - refer to Safe Work Australia document 'Workplace Exposure Standards for Airborne Contaminants, Date of Effect: 18 April 2013'.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

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Appropriate engineering controls:

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, RESPIRATOR.



Wear overalls, safety glasses and impervious gloves. If determined by a risk assessment an inhalation risk exists, wear a half-facepiece respirator fitted with a suitable canister. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Slightly Viscous Liquid
Colour:	Brown
Odour:	Pleasant Fruity
Odour Threshold:	Not available
Solubility:	Miscible in water.
Specific Gravity:	1.53
Relative Vapour Density (air=1):	Not available
Vapour Pressure (20 °C):	Not available
Flash Point (°C):	Not applicable
Flammability Limits (%):	Not applicable
Autoignition Temperature (°C):	Not available
Boiling Point/Range (°C):	ca. 100 at 100kPa
Decomposition Point (°C):	Not available
pH:	Not available
Viscosity:	Not available
Evaporation Rate:	Not available
Partition Coefficient:	Not available
Freezing Point/Range (°C):	Not available

10. STABILITY AND REACTIVITY

Reactivity: No information available.

Chemical stability: Stable if stored and handled under recommended conditions.

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Possibility of hazardous reactions:	None known.
Conditions to avoid:	Avoid contact with foodstuffs. Avoid exposure to direct sunlight.
Incompatible materials:	Incompatible with strong acids , strong bases .
Hazardous decomposition products:	Oxides of arsenic.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion:	Swallowing can result in nausea, vomiting, abdominal pain, diarrhoea, headache, dizziness, stupor, convulsions, paralysis and death.
Eye contact:	A mild eye irritant.
Skin contact:	Contact with skin will result in mild irritation.
Inhalation:	Breathing in mists or aerosols may produce respiratory irritation.

Acute toxicity: No LD50 data available for the product. For the constituent Monosodium methylarsonate (MSMA):
Oral LD50 (rat): 700 mg/kg
Inhalation LC50 (rat): >20 mg/L/4hr

Skin corrosion/irritation: Mild irritant (rabbit).

Serious eye damage/irritation: Mild irritant (rabbit).

Chronic effects: No information available for the product. Arsenic and inorganic arsenic compounds: Classified by the International Agency for Research on Cancer (IARC) as a Group 1. Group 1 - The agent is carcinogenic to humans.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Avoid contaminating waterways.
Persistence/degradability:	Organoarsenical compounds are metabolised by soil bacteria to alkylarsines, arsenated and monomethyl arsonic acid. The half life in soil is 55 days. Bioconcentration of arsenic occurs in aquatic organisms. Bioconcentration factors range from 0 to 17 in freshwater invertebrates and fish to 350 in marine oysters.
Aquatic toxicity:	Harmful to aquatic organisms. May cause long lasting harmful effects to aquatic life. For MSMA:
48hr LC50 (Daphnia magna):	77.5 mg/L
96hr LC50 (bluegill sunfish):	>51 mg/L
96hr EC50 (algae):	7.6 mg/L (Selenastrum, 5d)
Terrestrial toxicity:	Harmful to bees.
Oral LD50 (ug/bee):	68

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13. DISPOSAL CONSIDERATIONS

Disposal methods:

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site.

If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

14. TRANSPORT INFORMATION

Road and Rail Transport

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

15. REGULATORY INFORMATION

Classification:

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

Classification of the chemical:

Acute Oral Toxicity - Category 4

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

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Acute Aquatic Toxicity - Category 3

Chronic Aquatic Toxicity - Category 3

Hazard Statement(s):

H302 Harmful if swallowed.

Poisons Schedule (SUSMP): S7 Dangerous Poison.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

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References:

Supplier Safety Data Sheet; 10/ 2014.

'Registry of Toxic Effects of Chemical Substances'. Ed. D. Sweet, US Dept. of Health & Human Services: Cincinnati, 2016.

This safety data sheet has been prepared by Ixom Operations Pty Ltd Toxicology & SDS Services.

Reason(s) for Issue:

First Issue Primary SDS

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.