

# Material Safety Data Sheet



PRODUCT NAME           **ChemAg MSMA 800**  
APVMA Product Code:   56509

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## 1 - IDENTIFICATION OF CHEMICAL PRODUCT AND COMPANY

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**Supplier Name**           **IMTRADE AUSTRALIA PTY LTD**  
**Address**                   17 Ocean Street, Kwinana, Western Australia, AUSTRALIA, 6167  
**Telephone**               (08) 9419 0333  
**Fax**                       (08) 9419 7516  
**Emergency**              In a Transport Emergency Dial 000 – Police or Fire Brigade  
**Email**                     sales@imtrade.com.au  
**Web site**                 http://www.imtrade.com.au  
**Product Use:**            Agricultural herbicide for use as described on the product label.  
**Creation Date:**         **March, 2008**  
**This version issued:**   **First issue: March, 2008**  
**Product type:**         MSMA (monosodium methylarsonate) is an arsenic based herbicide.

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## SECTION 2 - HAZARDS IDENTIFICATION

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### Statement of Hazardous Nature

This product is classified as: T, Toxic. N, Dangerous to the environment. Hazardous according to the criteria of ASCC.

Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

**Risk Phrases:** R33, R45, R48, R48/21/22, R51/53. Danger of cumulative effects. May cause cancer. Danger of serious damage to health by prolonged exposure. Harmful: danger of serious damage to health by prolonged exposure in contact with skin, and if swallowed. Toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment.

**Safety Phrases:** S20, S23, S24, S36, S60, S61, S1/2, S24/25. When using, do not eat or drink. Do not breathe spray mists. Avoid contact with skin. Wear suitable protective clothing. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/Safety Data Sheets. Keep locked up and out of reach of children. Avoid contact with skin and eyes.

**SUSDP Classification:** S7

**ADG Classification:** None allocated. Not a Dangerous Good under the ADG Code.

**UN Number:** None allocated

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### Emergency Overview

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**Physical Description & Colour:** Pink coloured liquid.

**Odour:** Fruity odour.

**Major Health Hazards:** may cause serious damage to health by prolonged exposure, may cause cancer, harmful in contact with skin, and if swallowed.

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### Potential Health Effects

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#### Inhalation:

**Short Term Exposure:** Available data indicates that this product is not harmful. However product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort.

**Long Term Exposure:** No data for health effects associated with long term inhalation.

#### Skin Contact:

**Short Term Exposure:** Available data shows that this product is harmful, but symptoms are not available. In addition product may be irritating, but is unlikely to cause anything more than mild transient discomfort.

**Long Term Exposure:** No data for health effects associated with long term skin exposure.

#### Eye Contact:

**Short Term Exposure:** This product may be irritating to eyes, but is unlikely to cause anything more than mild transient discomfort.

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**Long Term Exposure:** No data for health effects associated with long term eye exposure.

### Ingestion:

**Short Term Exposure:** Significant oral exposure is considered to be unlikely. Available data shows that this product is harmful, but symptoms are not available. However, this product may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.

**Long Term Exposure:** No data for health effects associated with long term ingestion.

### Carcinogen Status:

**ASCC:** No significant ingredient is classified as carcinogenic by ASCC.

**NTP:** No significant ingredient is classified as carcinogenic by NTP.

**IARC:** MSMA is classed 1 by IARC - carcinogenic to humans. NB: This evaluation applies to Arsenic and arsenic compounds group as a whole and not necessarily to all individual compounds within the group).

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS No	Conc,%	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
MSMA (monosodium methyl arsonate)	2163-80-6	800g/L	0.05*	not set
Other non hazardous ingredients	secret	to 100	not set	not set

\* This value applies to arsenic and soluble arsenic compounds and is expressed as As.

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The ASCC TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak "is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

## SECTION 4 - FIRST AID MEASURES

### General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call.

**Inhalation:** No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

**Skin Contact:** Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts) and completely decontaminate them before reuse or discard.

**Eye Contact:** No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

**Ingestion:** If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

## SECTION 5 - FIRE FIGHTING MEASURES

**Fire and Explosion Hazards:** There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

**Extinguishing Media:** Not Combustible. Use extinguishing media suited to burning materials.

**Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade.

**Flash point:** Does not burn.

**Upper Flammability Limit:** Does not burn.

**Lower Flammability Limit:** Does not burn.

**Autoignition temperature:** Not applicable - does not burn.

**Flammability Class:** Does not burn.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Accidental release:** In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including eye/face protection. All skin areas should be covered. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include rubber, PVC. Eye/face protective equipment should comprise as a minimum, protective goggles. If

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there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned below (section 8). Otherwise, not normally necessary.

Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

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## SECTION 7 - HANDLING AND STORAGE

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**Handling:** Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

**Storage:** This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label.

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## SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

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The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

ASCC Exposure Limits	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
Monosodium methyl arsenate)	0.05	not set

The ADI for MSMA is set at 0.0005mg/kg/day. The corresponding NOEL is set at 0.5mg/kg/day. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, Dec 2006.

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

**Ventilation:** No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that vapours and mists are minimised.

**Eye Protection:** Eye protection such as protective glasses or goggles is recommended when this product is being used.

**Skin Protection:** Prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered. See below for suitable material types.

**Protective Material Types:** We suggest that protective clothing be made from the following materials: rubber, PVC.

**Respirator:** Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above. Otherwise, not normally necessary.

Safety deluge showers should, if practical, be provided near to where this product is being used.

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## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES:

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<b>Physical Description &amp; colour:</b>	Pink coloured liquid.
<b>Odour:</b>	Fruity odour.
<b>Boiling Point:</b>	Not available.
<b>Freezing/Melting Point:</b>	No specific data. Liquid at normal temperatures.
<b>Volatiles:</b>	No data.
<b>Vapour Pressure:</b>	No data.
<b>Vapour Density:</b>	No data.
<b>Specific Gravity:</b>	No data.
<b>Water Solubility:</b>	Soluble.
<b>pH:</b>	No data.
<b>Volatility:</b>	No data.

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<b>Odour Threshold:</b>	No data.
<b>Evaporation Rate:</b>	No data.
<b>Coeff Oil/water Distribution:</b>	No data
<b>Autoignition temp:</b>	Not applicable - does not burn.

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**SECTION 10 - STABILITY AND REACTIVITY**

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**Reactivity:** This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

**Conditions to Avoid:** Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

**Incompatibilities:** strong oxidising agents.

**Fire Decomposition:** Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water, arsenic compounds, sodium compounds. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

**Polymerisation:** This product will not undergo polymerisation reactions.

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**SECTION 11 - TOXICOLOGICAL INFORMATION**

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**Local Effects:**

**Target Organs:** There is no data to hand indicating any particular target organs.

**Toxicity:** Prolonged contact with the concentrate may cause skin irritation and may irritate the eyes.

**Acute Toxicity - Oral:** Ingestion of the concentrate in relatively large amounts may result in nausea, vomiting, abdominal pain, diarrhoea and headache followed by dizziness, stupor, convulsions, paralysis and death.

LD<sub>50</sub> (rat) 900mg/kg for MSMA

**Acute Toxicity - Inhalation:** Breathing in high concentrations of mists or aerosols of this material may cause nausea and irritation of the nose, throat and respiratory tract.

LC<sub>50</sub> (rat) (4hr) >20mg/L

**Chronic Effects:** Chronic feeding studies in animals do not indicate any cumulative toxicity and show that the compound is neither a carcinogen nor a teratogen.

**Carcinogenic Effects:** Data indicates no carcinogenic effects.

See Cohen et al, 2006, Methylated arsenicals: the implications of metabolism and carcinogenicity studies in rodents to human risk assessment. Crit. Rev Toxicol. 2006 Feb; 36(2) :99-133

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**Classification of Hazardous Ingredients**

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Ingredient	Risk Phrases
No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations.	

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**SECTION 12 - ECOLOGICAL INFORMATION**

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Toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment. This product is not biodegradable; it may accumulate in the soil or water and cause long term problems.

**Toxicity:** The following is data for the active ingredient MSMA.

**Fish:** LC<sub>50</sub> (96 hr) for rainbow trout is >167 mg/l  
LC<sub>50</sub> (96 hr) for bluegill sunfish is >51 mg/l

**Daphnia:** LC<sub>50</sub> (48 hr) for daphnia is 77.5 mg/l

**Algae:** EC<sub>50</sub> (5d) for Selenastrum is 7.6 mg/l

**Other Organisms:** Birds Not toxic to birds. LD<sub>50</sub> for quail is 425 mg/kg

**Bees** Not toxic to bees. LD<sub>50</sub> 68 µg/bee

**Persistence/ Degradability** Soil half-life for MSMA is 55 days, soil half-life for the primary metabolite is 88 days.

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**SECTION 13 - DISPOSAL CONSIDERATIONS**

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**Disposal:** Special help is available for the disposal of Agricultural Chemicals. The product label will give general advice regarding disposal of small quantities, and how to cleanse containers. However, for help with the collection of unwanted rural chemicals, contact ChemClear 1800 008 182 <http://www.chemclear.com.au/> and for help with the disposal of empty drums, contact DrumMuster <http://www.drummuster.com.au/> where you will find contact details for your area.

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**SECTION 14 - TRANSPORT INFORMATION**

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**ADG Code:** This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

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**SECTION 15 - REGULATORY INFORMATION**

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**AICS:** All of the significant ingredients in this formulation are compliant with NICNAS regulations.

The following ingredient: MSMA, is mentioned in the SUSDP.

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**SECTION 16 - OTHER INFORMATION**

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**This MSDS contains only safety-related information. For other data see product literature.**

**Acronyms:**

**ADG Code** Australian Code for the Transport of Dangerous Goods by Road and Rail (7<sup>th</sup> edition)

**AICS** Australian Inventory of Chemical Substances

**ASCC** Office of the Australian Safety and Compensation Council

**CAS number** Chemical Abstracts Service Registry Number

**Hazchem Code** Emergency action code of numbers and letters that provide information to emergency services especially firefighters

**IARC** International Agency for Research on Cancer

**NOS** Not otherwise specified

**NTP** National Toxicology Program (USA)

**R-Phrase** Risk Phrase

**SUSDP** Standard for the Uniform Scheduling of Drugs & Poisons

**UN Number** United Nations Number

This MSDS summarises our best knowledge of the health and safety hazard information on the product, and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace, including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact Imtrade Australia Pty Ltd, or in the event of an emergency, 000. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

Please read all labels carefully before using product.

This MSDS is prepared in accord with the ASCC document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2011(2003)]

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End of Report

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