

Monopoly

Section 1 - Identification of Chemical Product and Company

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Trade Name: **Monopoly Herbicide**
Product Use: Selective Herbicide
Creation Date: **January 2012**

Section 2 - Hazards Identification

Statement of Hazardous Nature

CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF ASCC
NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

SUSDP Classification: S7

Risk Phrases: R23/25 Toxic by inhalation and if swallowed

Safety Phrases: S2 keep out of reach of children, S13 Keep away from food, drink and animal feeding stuffs

Hazchem Code: None allocated

Emergency Overview

Physical Description & colour: Clear, light yellowish liquid

Odour: No odour

Major Health Hazards: Toxic if swallowed or inhaled

Potential Health Effects

Inhalation: Toxic if inhaled in large quantities, smaller amounts may cause irritation and burning of the throat. Breathing in high concentrations of mists or aerosols of this material may cause nausea and irritation of the nose, throat and respiratory tract.

Skin Contact: Prolonged contact with the concentrate may cause irritation.

Eye Contact: May irritate the eyes.

Ingestion: Harmful if swallowed. 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.

Carcinogen Status:

ASCC: No significant ingredient is classified as carcinogenic by ASCC at stated concentration.

NTP: No significant ingredient is classified as carcinogenic by NTP at stated concentration

IARC: No significant ingredient is classified as carcinogenic by IARC at stated concentration

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc.%	TWA (mg/m ³)	STEL (mg/m ³)
MSMA	2163-80-6	72	not set	not set
Non hazardous		28	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible. . A TWA has not been established by Worksafe Australia for any of the major ingredients in this product. There is a blanket limit of 10mg/m³ for dusts or mists when limits have not otherwise been established. The 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 should not be exceeded for more than 15 minutes and should not be repeated for 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

MATERIAL SAFETY DATA SHEET

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.

Ingestion: Call a poison control centre 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 a poison control centre or doctor. Do not give anything by mouth to an unconscious person or convulsing person.

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

Skin Contact: If product gets on skin, thoroughly wash contacted areas. If irritation persists, seek medical attention.

Eye Contact: Rinse immediately with plenty of water for at least 15 minutes, holding eye open and taking care to rinse under eyelids as well. If irritation persists seek medical attention.

Notes to Doctor: Treat symptomatically. Note the nature of this product (arsenical pesticide).

Section 5 - Fire Fighting Measures

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

Extinguishing Media: Use extinguishing media suited to materials burning – Large fires, foam or water spray, small fires, Carbon dioxide, dry chemical

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. Immediately evacuate area. Fire fighters to wear non-flammable protective clothing, gloves, hat, goggles and self contained breathing apparatus. All skin areas to be covered.

Flash point: Not flammable

Upper Flammability Limit: N/A

Lower Flammability Limit: N/A

Auto ignition temperature: No data

Flammability Class: N/A

Fire Decomposition Products: May emit toxic fumes of arsenic oxides if involved in fire or exposed to extreme heat

Section 6 - Accidental Release Measures

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Wear protective chemically resistant clothing including face mask, face shield, and gauntlets. See above under Personal Protection regarding Australian Standards relating to personal protective equipment. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. Avoid using sawdust or other combustible material. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Do not dispose of undiluted chemical on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If there is any conflict between this MSDS and label, instructions on the label prevail. Dispose of only in accord with all regulations. Launder all contaminated clothing before re-use and advise laundry of nature of contaminant.

Section 7 - Handling and Storage

Handling: This product is a S7 Poison. Observe all relevant regulations regarding sale, transport and storage of this class of product. 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
workplace.

handling in order to minimise risks to persons using the product in the

Storage: Store in a cool, dry place away from children and animals or foodstuffs. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames, and make sure that the product does not come into contact with substances listed under "Materials to avoid" in Section 10.

Section 8 - Exposure Controls and Personal Protection

This product is intended for outdoor use where engineering controls are not necessary. 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**.

Exposure Limits	TWA (mg/m ³)	STEL (mg/m ³)	ADI (mg/Kg/day)	NOEL (mg/Kg/day)
MSMA	not set	not set	0.0005	0.5

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. STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL.

ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. (ADI List 31ST Dec 2006)

Ventilation: Avoid vapours and provide local exhaust ventilation where necessary.

Eye Protection: To avoid contact with eyes, wear face shield, goggles or safety glasses. Emergency eyewash should be readily accessible.

Skin Protection: Wear impermeable PVC gloves to prevent skin contact. Wear overall and long sleeves to prevent skin contact

Respirator: Use respirator protection with cartridge on account of this product. Use P2 type canister respirator if required

Safety Boots: Safety boots in industrial situations are advised

Provision of eye wash facilities and safety shower recommended.

Wash hands before eating, drinking, smoking or going to toilet, launder protective clothing before re-use or destroy contaminated clothing. Advise laundry of nature of contamination.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Clear yellowish liquid
Odour:	No odour
Boiling Point:	Approx 100°C at 100kPa
Volatiles:	Water component
Vapour Pressure:	No data
Vapour Density:	No data.
Specific Gravity:	1.4 @ 20°C
Water Solubility:	Completely soluble
pH:	No data.
Odour Threshold:	No data.
Evaporation Rate:	No data.
Flash Point	Does not burn

Section 10 - Stability and Reactivity

Reactivity: This product is stable under normal temperatures and pressures, when stored and handled in accordance with this MSDS

Conditions to Avoid: Store away from heat or fire, keep away from strong acids and bases

Incompatibilities: Strong acids and alkalis.

Fire Decomposition: May emit toxic fumes of arsenic oxides if involved in fire or exposed to extreme heat

Polymerisation: Will not spontaneously polymerise

Section 11 - Toxicological Information

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.

Acute Toxicity – Oral LD₅₀ (rat) 900 mg/kg for monosodium methylarsonate (MSMA)

Acute Toxicity – Inhalation LC₅₀ (rat) (4hr) >20 mg/L

Eye Irritation: Mild eye irritant.

Skin Irritation: Mild skin irritant

Section 12 - Ecological Information

Persistence / Degradability

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

Other Precautions: Do not contaminate dams, waterways or sewers with this product or the containers, which have held this product. Spray drift should be avoided

The following is data for the active ingredient, MSMA.

Acute Toxicity

Fish: LC50 (96 hr) for rainbow trout is >167 mg/L, LC50 (96 hr) for bluegill sunfish is >51 mg/L.

Aquatic organisms: LC50 (48hr) for daphnia is 77.5 mg/L.

Algae: EC50 (5d) for Selenastrum is 7.6 mg/L.

Other Organisms: Not toxic to birds. LD50 for quail is 425 mg/kg, Bees: Not toxic to bees. LD50 68 µg/bee

Section 13 - Disposal Considerations

Disposal: Full details regarding disposal of used containers, 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. Dispose of only in accord with all regulations.

On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities that hold periodic collections of unwanted chemicals (ChemClear®).

Container Disposal Do not use this container for any other purpose. Triple rinse containers, add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. drumMUSTER is the national program for the collection and recycling of empty, cleaned, non-returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMuster symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, puncture or shred and bury containers in local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

Section 14 - Transport Information

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

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are to be found in the public AICS Database.

SUDSP: Scheduled as S7 – Dangerous Poison

Section 16 - Other Information

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

Acronyms:

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ADG	Code Australian Code for the Transport of Dangerous Goods by Road and Rail
AICS	Australian Inventory of Chemical Substances
ASCC	Australian Safety & Compensation Council
CAS number	Chemical Abstracts Service Registry Number
Hazchem Number	Emergency action code of numbers and letters that provide information to emergency services especially fire-fighters
IARC	International Agency for Research on Cancer
NOHSC	National Occupational Health and Safety Council
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
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 OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS MSDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS
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 NOHSC document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2011(2003)]
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