



Material Safety Data Sheet

Infosafe No. NU0DA Issue Date : May 2006 ISSUED by NUFARM

Product Name : MCPA 500 Selective Herbicide

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name MCPA 500 Selective Herbicide
Product Code 0565
Product Type Group I Herbicide
Company Name NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
Address 103-105 Pipe Road Laverton North
Victoria 3026 Australia
Emergency Tel. 24hr 1800 033 498
Telephone/Fax Number Tel: (03) 9282-1000 Fax: (03) 9282-1001
Recommended Use For the selective control of broadleaf weeds in cereals, linseed, pastures, sugar cane and turf as per the Directions for Use table on the label.
Other Information This MSDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

2. HAZARDS IDENTIFICATION

Hazard Classification HAZARDOUS SUBSTANCE.
NON-DANGEROUS GOODS.
Hazard classification according to the criteria of NOHSC.
Dangerous goods classification according to the Australia Dangerous Goods Code.
Risk Phrase(s) R22 Harmful if swallowed.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
Safety Phrase(s) S13 Keep away from food, drink and animal feeding stuffs.
S2 Keep out of reach of children.
S25 Avoid contact with eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/39 Wear suitable gloves and eye/face protection.
S46 If swallowed, seek medical advice immediately and show this container or label.
Other Information Poisons Schedule S6

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Liquid

Ingredients	Name	CAS	Proportion
	MCPA (as present as the Dimethylamine salt)	94-74-6	500 g/L
	Other ingredients (considered non-hazardous)		Balance

4. FIRST AID MEASURES

Inhalation Remove affected person to fresh air until recovered.
If symptoms develop or persist, seek medical advice.
Ingestion Rinse mouth and then drink plenty of water.
Do not give anything by mouth to a semi-conscious or unconscious person.
If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Aust). Make every effort to prevent vomit from entering the lungs by careful placement of the patient.



Material Safety Data Sheet

Page 2 of 5

Infosafe No. NU0DA Issue Date : May 2006 ISSUED by NUFARM

Product Name : **MCPA 500 Selective Herbicide**

Skin	Wash affected areas thoroughly with soap and water. Remove contaminated clothing and launder before re-use.
Eye	If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical advice immediately.
First Aid Facilities	If poisoning occurs, contact a doctor or Poisons Information Centre on 13 11 26 (Australia).
Advice to Doctor	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.
Hazards from Combustion Products	May emit toxic fumes of hydrogen chloride or phosgene if involved in fires or exposed to extreme heat.
Speical Protective Equipment for fire fighters	Breathable air apparatus should be worn when fighting a fire in which this product is involved.
Specific Hazards	Considered low risk due to water content, however upon evaporation of water the product is combustible.
Hazchem Code	None Allocated

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal	Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect spilled material and waste in sealable open-top type containers for disposal. On-site disposal of concentrate is not acceptable.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.
Clean-up Methods - Large Spillages	Place damaged containers in recovery bins (if available) and return to manufacturer. If large liquid spills occur, attempt to recover as much spilt material from sumps and bunded areas before absorbing remaining material into vermiculite or other absorbent.
Environmental Precautions	This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

7. HANDLING AND STORAGE

Precautions for Safe Handling	Do NOT spray in high winds. Do NOT contaminate dams, rivers or streams, or any other water bodies with pesticide or used containers.
Conditions for Safe Storage	Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight.
Tank Cleaning	See label for detailed information on cleaning of spray equipment.
Other Information	Always read the label and any attached leaflet before use. Do not use on or in situations where damage to susceptible crops or plants such as cotton, tobacco, tomatoes, flowers, vines, fruit trees or other susceptible crop plants may result from direct application or drift. Sprayed weeds may become more palatable to stock and a higher intake of some weeds may result in stock poisoning and death from causes such as nitrate poisoning. Care should be taken especially where capeweed, Paterson's curse and variegated thistles predominate in the pasture.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	No exposure standards have been set for this product or the active ingredients.
------------------------------------	---



Material Safety Data Sheet

Page 3 of 5

Infosafe No. NU0DA Issue Date : May 2006 ISSUED by NUFARM

Product Name : **MCPA 500 Selective Herbicide**

Engineering Controls	Handle in well ventilated areas, generally natural ventilation is adequate.
Personal Protective Equipment	When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length rubber gloves and face shield or goggles.
Hygiene Measures	After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash contaminated clothing and safety equipment.
Requirements Concerning Special Training	NSW regulations require that people who use pesticides in their job or business must have training in the application of the materials. By 1st September, 2005 all users must have received such training.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid
Appearance	Clear, red-brown liquid
Odour	Ammonia like odour
Solubility in Water	Soluble in water.
Specific Gravity	1.133
pH Value	8-9
Vapour Pressure	Negligible
Volatile Component	36%
Octanol/Water Partition Coefficient	Kow Log P is -0.71 at pH7 (MCPA acid)
Flash Point	None
Flammability	Not flammable
Other Information	pKa is 3.07

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Incompatible Materials	Reaction of the concentrate or spray mix with acids will precipitate solid MCPA acid and largely de-activate the product and cause blockages in spray equipment. The addition of a strong alkali such as caustic soda will cause release of dimethylamine vapour. Dimethylamine is moderately toxic, LD50 (oral, rat) is 700 mg/kg and a TLV of 10 ppm (TWA) has been set.
Hazardous Polymerization	Hazardous polymerisation is not possible.

11. TOXICOLOGICAL INFORMATION

Toxicology Information	No harmful effects are expected if the precautions on the label and this MSDS are followed.
Inhalation	The components of the product are of low volatility and no adverse effects are expected from handling the concentrate. A moderate hazard exists from inhalation of spray and care should be taken to avoid inhalation of spray mists.
Ingestion	Not a likely route of exposure. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. However, swallowing of large amounts may cause injury. Ingestion of the concentrate in relatively large amounts can result in headache, nausea, lethargy, motor weakness and incoordination.



Material Safety Data Sheet

Page 4 of 5

Infosafe No. NU0DA Issue Date : May 2006 ISSUED by NUFARM

Product Name : **MCPA 500 Selective Herbicide**

Skin	Unless removed immediately, will cause irritation. Prolonged contact with the concentrate may result in absorption of MCPA in harmful amounts.
Eye	The concentrate will cause severe irritation and possible damage unless washed off immediately.
Chronic Effects	Liver and kidney damage has been noted in laboratory animals that have been fed excessive doses of MCPA.
Carcinogenicity	The weight of the evidence is that MCPA is not carcinogenic.
Acute Toxicity - Oral	The following data is for the active ingredient, MCPA dimethylamine salt. LD50 (rat) 1876 mg/kg
Acute Toxicity - Dermal	LD50 (rat) >2000 mg/kg
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >1.69 mg/l
Eye Irritation	MCPA dimethylamine salt is a severe eye irritant.
Skin Irritation	The product is a skin irritant.
Skin Sensitisation	Product is not a skin sensitiser.
Other Information	The Australian Acceptable Daily Intake (ADI) for MCPA for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 1.1 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, 'ADI List', TGA, September 2005).

12. ECOLOGICAL INFORMATION

Mobility	Rapid degradation in soil prevents significant downward movement under normal conditions.
Known Harmful Effects on the Environment	MCPA dimethylamine salt products do not appear to pose any threat to birds. MCPA dimethylamine salt products do not appear to pose any threat to fish or other aquatic organisms other than in very high concentrations.
Other Precautions	Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
Environ. Protection	Spray drift can cause damage, read the label for more information.
Acute Toxicity - Fish	LC50 (96 hr) for rainbow trout is 50 mg/l for MCPA dimethylamine salt
Acute Toxicity - Daphnia	EC50 (48 hr) for daphnia is >190 mg/l for MCPA dimethylamine salt.
Acute Toxicity - Algae	LC50 for algae is >392 mg/l.
Acute Toxicity - Other Organisms	Birds: Not toxic to birds. LD50 for bobwhite quail is 270 mg/kg Bees: Not toxic to bees. LD50 >200 µg/bee.

13. DISPOSAL CONSIDERATIONS

Product Disposal	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 who hold periodic collections of unwanted chemicals (ChemCollect).
-------------------------	---



Material Safety Data Sheet

Page 5 of 5

Infosafe No. NU0DA Issue Date : May 2006 ISSUED by NUFARM

Product Name : MCPA 500 Selective Herbicide

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.

14. TRANSPORT INFORMATION

U.N. Number None Allocated

DG Class None Allocated

Hazchem Code None Allocated

Packing Group None Allocated

Storage and Transport Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

15. REGULATORY INFORMATION

Poisons Schedule S6

Packaging & Labelling POISON
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Hazard Category Harmful, Irritant

AICS (Australia) All of the components in this product are listed on the Australian Inventory of Chemical Substances.

16. OTHER INFORMATION

Contact Person/Point Normal Hours: Mr Volker Maier Phone: (03) 9282 1000
After Hours: Shift Supervisor Phone: 1800 033 498

Revisions Highlighted The MSDS was reviewed. Minor changes were made to the information. The MSDS is now issued in a 16 header format.
...End Of MSDS...