

Unidifen 500

Issued: July, 2010

Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER

Trade Name:	United Farmers Unidifen 500 Herbicide
Substance:	Water solution of herbicide ingredient and emulsifier.
Product Use:	Agricultural herbicide for use as described on the product label.
Company Identification:	Ravensdown Fertiliser Co-operative Limited – Incorporated in New Zealand
Address:	2 Birksgate Rd Rous Head North Fremantle, WA 6160
Customer Centre:	1800 624 122
Poisons Information Centre:	13 1126 in Australia, 0800 764 766 in New Zealand
Emergency Telephone Number:	For specialist advice call 1800 705 766 (24hr) (Emergencies Only)
Transport Emergency:	IN AN EMERGENCY, DIAL 000 – FIRE or POLICE

Section 2: HAZARD IDENTIFICATION

Statement of Hazardous Nature	This product is Not classified as hazardous according to the criteria of NOHSC Australia. Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.
Risk Phrases:	Not Hazardous - No criteria found
Safety Phrases:	S25 Avoid contact with eyes S36 Wear suitable protective clothing

Section 3: COMPOSITION INFORMATION

INGREDIENTS	CAS No	Conc,%	TWA (mg/m ³)	STEL (mg/m ³)
Diflufenican	83164-33-4	50	not set	not set
Other non hazardous ingredients	secret	<10	not set	not set
Water	7732-18-5	to 100	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.

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.

Section 4: FIRST AID MEASURES

Emergency Overview

Physical Description & Colour:	Viscous, light brown coloured suspension.
Odour:	No data.
Major Health Hazards:	No significant risk factors have been found for this product.
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:	First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Skin Contact:	Irritation is unlikely. However, if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed.
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 product is swallowed or gets in mouth, wash mouth with water and give some water to drink. If symptoms develop, or if in doubt contact a Poisons Information Centre or 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. This product is likely to decompose only after heating to dryness, followed by further strong heating. Fire decomposition products from this product are likely to be toxic and corrosive 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

Spills and Disposal:	Wear appropriate protective clothing. Exclude non-essential people from the area. Contain spill and absorb with inert material such as soil, sand or absorbent granules and place in a sealable waste container. Dispose of waste safely in an approved landfill.
Protective Clothing:	For appropriate personal protective equipment see section 8.
Environmental Precaution	Prevent from entering drains, waterways or sewers. If spill does enter waterways contact local authority.

Section 7: HANDLING AND STORAGE

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:	Protect this product from light. 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.

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

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:	Exposure limits have not been established by NOHSC for any of the significant ingredients in this product. The ADI for Diflufenican is set at 0.2mg/kg/day. The corresponding NOEL is set at 16.3mg/kg/day. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, Dec 2004. 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 is not normally necessary when this product is being used. However, if in doubt, wear suitable protective glasses or goggles.
Skin Protection:	The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow-length) when skin contact is likely.

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

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical Description & colour:	Viscous, light brown coloured suspension.
Odour:	No data.
Boiling Point:	Approximately 100°C at 100kPa.
Freezing/Melting Point:	Approximately 0°C.
Volatiles:	Water component.
Vapour Pressure:	2.37 kPa at 20°C (water vapour pressure).
Vapour Density:	No data.
Specific Gravity:	1.19 approx
Water Solubility:	Completely soluble in water.
pH:	No data.
Volatility:	No data.
Odour Threshold:	No data.
Evaporation Rate:	No data.
Coeff Oil/water Distribution:	No data
Autoignition temp:	Not applicable - does not burn.

Section 10: STABILITY AND REACTIVITY

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:	Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.
Incompatibilities:	Strong acids, strong bases, strong oxidising agents.
Fire Decomposition:	This product is likely to decompose only after heating to dryness, followed by further strong heating. Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas. Hydrogen fluoride gas and other compounds of fluorine. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death. Hydrogen cyanide poisoning signs and symptoms are weakness, dizziness, headache, nausea, vomiting, coma, convulsions, and death. Death results from respiratory arrest. Hydrogen cyanide gas acts very rapidly; symptoms and death can both occur quickly.
Polymerisation:	This product will not undergo polymerisation reactions.

Section 11: TOXICOLOGICAL INFORMATION

Potential Health Effects

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 indicates that this product is not harmful. It should present no hazards in normal use. However product may be mildly irritating, but is unlikely to cause anything more than mild discomfort which should disappear once contact ceases.
Long Term Exposure:	No data for health effects associated with long term skin exposure.

Eye Contact

Short Term Exposure:	This product may be mildly irritating to eyes, but is unlikely to cause anything more than mild discomfort which should disappear once product is removed.
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. 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

NOHSC:	No significant ingredient is classified as carcinogenic by NOHSC.
NTP:	No significant ingredient is classified as carcinogenic by NTP.
IARC:	No significant ingredient is classified as carcinogenic by IARC.

Classification of Hazardous Ingredients

Diflufenican:	LD ₅₀ Oral, Rat >2000mg/kg	LD ₅₀ Oral (Mouse) >1000mg/kg
	LD ₅₀ Oral (Rabbit) >5000mg/kg	LD ₅₀ Dermal (Rat) >2000mg/kg
	LC ₅₀ Inhal (Rat) >2.34mg/L/4hr	

Section 12: ECOLOGICAL INFORMATION

Diflufenican

Birds:	Oral LD ₅₀ for quail >2150mg/kg, for mallard ducks >4000 mg/kg
Fish:	LC ₅₀ (96hr) for rainbow trout 56-100, carp 105mg/L
Bees:	nontoxic to honeybees
Worms:	nontoxic to earthworms
Daphnia:	LC ₅₀ (48hr) no effect at 10mg/L
Algae:	EC ₅₀ for <i>Scenedesmus subspicatus</i> : no growth inhibition at 10mg/L

Environmental fate

Plants:	In cereals, rapidly metabolised via nicotinamide and nicotinic acid to carbon dioxide. Following pre-emergence application in autumn, no residues were detectable in grain and straw after about 200-250 days.
Soil/Environment:	In soil, degradation proceeds to bound residues plus carbon dioxide. Half lives vary from 15 to 30 weeks depending on soil type and water content.

Section 13: DISPOSAL INFORMATION

Follow label advice for the disposal of empty containers, packaging and for the return of refillable containers.

Product Disposal:	For the disposal of unwanted / unusable chemicals, seek advice from suppliers, local government, your local Waste Management Authority and consult ChemClear, 1800 008 182 http://www.chemclear.com.au/
Container Disposal:	Where possible, used containers should be recycled after triple rinsing. Check with local suppliers and or DrumMUSTER http://www.drummuster.com.au/ . Otherwise, bury at an authorised landfill. Before disposing of unwanted containers or used packaging on a property, ensure that all appropriate regulations, both Local and State Government, are observed. Significant penalties may apply.

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.
UN Number:	None allocated
SUSDP Classification:	None allocated
ADG Classification:	None allocated. Not a Dangerous Good under the ADG Code.

Section 15: REGULATORY INFORMATION

AICS:	All of the significant ingredients in this formulation are compliant with NICNAS regulations.
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Section 16: OTHER INFORMATION

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

This MSDS supersedes all others and was reviewed: February, 2010

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)]