



Section 1 - Identification of Chemical Product and Company

Diflufenican 500 SC Selective Herbicide

Trade Name: Agro-Essence Diflufenican 500 Herbicide

Product Use: Agricultural herbicide for use as described on the product label.

Company: Agro-Alliance (Australia) Pty Ltd.

Address: 2, Mavron Street, Ashwood VIC 3147, Australia

Telephone Number: +61 03 86442677 / 86442679

Fax Number: +61 03 98073883

Website: www.agroalliance.com.au

Issue Date: July 2012

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: Not classified as hazardous according to the criteria of SWA Australia.

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

Risk Phrases: Not Hazardous - No criteria found.

Safety Phrases: Not Hazardous - No criteria found.

SUSMP Classification: None allocated.

ADG Classification: None allocated. Not a Dangerous Good.

UN Number: None allocated.

Section 3 - Composition/Information on Ingredients

Ingredients:

CHEMICAL	CAS NUMBER	PROPORTION
Diflufenican	83164-33-4	50
Surfactants/Suspension agents		≈ 10
Water		To 100



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Section 4 - First Aid Measures

Skin contact: Remove contaminated clothing. Wash contaminated skin with soapy water. If skin irritation develops, get medical attention. Wash clothing thoroughly before re-use.

Eye contact: Rinse eye(s) with clean running water for 15 mins. Get medical attention if irritation develops.

Ingestion: Rinse mouth. Give water to drink if patient is conscious. DO NOT induce vomiting. If vomiting occurs ensure patient can breathe, then give water to drink. Get medical attention if patient feels at all unwell.

Advice to doctor: No specific antidote is known. Treat symptomatically.

Section 5 - Fire Fighting Measures

Product is not flammable. Some components will burn after heating to dryness. Treat fire as appropriate to other flammables present.

Special hazards in fire: Product is not flammable. Combustion may release carbon dioxide, nitrogen oxides, and/or fluorine compounds.

Required special protective equipment for fire-fighters: Wear self contained breathing apparatus if in enclosed space.

Hazchem code: Not applicable.

Section 6 - Accidental Release Measures

Emergency procedures: Wear protective equipment to prevent skin and eyes being affected. Evacuate unprotected and unnecessary personnel from area of spill. If material is leaking from a container, stop the leak only if this can be done safely. Prevent spillage entering drains or watercourse.

Methods for containment & cleanup: Vermiculite, Sand, Soil is a suitable absorbent, especially soils high in clay. Soil can be used to form bunds to contain spillage.

Contaminated soil should be collected for disposal at a suitable landfill.

Contaminated area and tools should be washed down with hypochlorite bleach.

Personal protective equipment and clothing should be washed with soapy water



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Section 7 - Handling and Storage

Handling: Keep away from food, drink, and animal feedstuff.

KEEP OUT OF REACH OF CHILDREN.

Wear suitable Personal protective equipment when handling and spraying.

Storage: Store in the original container in a dry, cool, ventilated, LOCKED area.

DO NOT store in prolonged sunlight.

DO NOT store with food, seed, or animal feedstuff.

Section 8 - Exposure Controls and Personal Protection

National exposure standards: Exposure limits have not been established by NOHSC for any of the significant ingredients in this product.

Biological limit values: The ADI for Diflufenican is set at 0.2mg/kg/day. The corresponding NOEL is set at 16.3mg/kg/day.

Engineering measures: Use assisted ventilation in enclosed spaces if needed, especially storage areas.

Personal protection equipment:

Eye/face protection: Goggles or glasses to AS 1366, AS/NZS1337

Hand/skin protection: Overalls, PVC gloves and apron, face shield

Respiratory protection: Should not be necessary under normal conditions. If spray mist may be encountered, a particulate filter to AS/NZS 1715 should be worn..

Section 9 - Physical and Chemical Properties:

Appearance: Pale viscous liquid suspension.

Odour: Faint.

pH: Slightly alkaline.

Vapour pressure: Will be that of water.

Vapour density: Will be that of water.

Boiling point/range: Slightly above 100 °C, increasing as water content drops.

Melting/freezing point: < 0 °C.

Solubility: Fully miscible. Active will be insoluble micro- particles.

Specific gravity - density: 1.175



Flashpoint: Not Applicable.

Explosive limits (air): Not Applicable.

Ignition temperature: Not Applicable.

Section 10 - Stability and Reactivity

Chemical stability: Normally stable. Active may degrade in strong UV light.

Conditions to avoid: Very high or low temperatures.

Materials to avoid: Strong oxidising agents.

Hazardous decomposition products: Oxides of nitrogen and chlorine. Burning with limited oxygen may produce carbon monoxide.

Hazardous reactions: Not known. Does not polymerise.

Section 11 - Toxicological Information

Acute toxicity:

Diflufenican: **LD50 Oral**, Rat >2000mg/kg, Mouse = >1000mg/kg, Rabbit = >5000mg/kg,

Dermal, Rat = >2000mg/kg **LC50 Inhalation**, Rat = >2.34mg/L/4hr

Chronic toxicity: Long term studies on rats, mice and dogs showed no carcinogenic teratogenic or oncogenic potential for diflufenican.

Diflufenican was not mutagenic. The no observable effect level listed by the Therapeutic Goods Administration for diflufenican is 16.3-mg/kg bw/day.

Possible routes of exposure: Inhalation of spray mist is the most likely cause of exposure.

Range of effects. Excessive exposure may affect **human health as follows:**

Skin contact: Not likely. Irritation may occur in sensitive individuals.

Eye contact: Not likely. Irritation may occur in sensitive individuals.

Inhalation/ingestion: Not likely, unless large amounts are consumed.

Dose/conc./conditions likely to cause injury: Several hundred mls.

Delayed effects if any:

Relevant negative data: Not known to be carcinogenic, mutagenic, or teratogenic

Section 12 - Ecological Information



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Ecotoxicity:

Aquatic organisms: Active is not toxic. Surfactants in formulation may be damaging.

Flora: Toxic to certain species, especially Brassicaceae and Asteraceae. Others are quite tolerant.

Fauna: Not toxic.

Soil organisms: Not toxic.

Bees: Not toxic.

Ozone effects: None recorded.

Persistence/degradation: Moderately persistent in soil, with a half life measured in weeks to months.

Mobility: Not readily leached.

Bioaccumulative potential: Unknown but probably low..

Section 13 - Disposal Considerations

Product: Whenever possible, product should be used for its intended purpose, even if reclaimed from spillage (reclaimed product must be uncontaminated).

Containers: Whenever possible, follow directions given on container.

If not available, triple or pressure rinse plastic or metal containers before disposal. Recycle containers if possible (replace cap and return clean containers to recycler or designated collection point). Treat rinsings as for product above.

If not recycling, break, crush or puncture and bury empty containers in a local authority landfill.

If no landfill is available, bury the containers below 500 mm 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.

Sewage: Do not dispose of product or rinsings into sewage systems or septic tanks.

Section 14 - Transport Information

Not a dangerous good, so has no UN Number, UN proper shipping name, ADG Class, or ADG Packing Group.

Special precautions: Do not store with foodstuffs.

Section 15 - Regulatory Information



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

This product is an Agricultural Chemical registered by the Agricultural Pesticides and Veterinary Medicines Authority.

Section 16 - Other Information

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

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 ASCC document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2001(2003)]