



Infosafe No™ 3NU73 Issue Date :October 2009 ISSUED by NUFARM CS: 1.4.21

Product Name **ASSOCIATE Herbicide**

Not classified as hazardous

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name ASSOCIATE Herbicide
Product Code 0095
Product Type Group B Herbicide
Company Name NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
Address 103-105 Pipe Road Laverton North
Victoria 3026 Australia
Emergency Tel. 1800 033 498 (24hr Australia)
Telephone/Fax Number Tel: +61 3 9282-1000
Fax: +61 3 9282-1001
Recommended Use For the control of certain brush and broadleaf species in native pastures, rights of way and commercial and industrial areas and for the control of certain broadleaf weeds in winter cereal crops, grass pastures and pasture renovation 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 Not classified as hazardous
NON-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) Not classified as hazardous
Other Information Poisons Schedule : Not Scheduled

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Solid

Ingredients	Name	CAS	Proportion
	Metsulfuron Methyl	74223-64-6	600g/kg
	Silica, amorphous precipitated	112926-00-8	20g/kg
	Kaolin clay	1332-58-7	155g/kg
	Other ingredients (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.
If vomiting occurs, give more water to drink to assist dilution.
Do not give anything by mouth to a semi-conscious or unconscious person.
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 if irritation develops or persists.
First Aid Facilities If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.
Advice to Doctor Treat symptomatically.

5. FIRE FIGHTING MEASURES



Material Safety Data Sheet

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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	Non-combustible. If involved in a major fire, could evolve oxides of carbon, nitrogen or sulfur.
Special Protective Equipment for fire fighters	Breathable air apparatus must be worn when fighting a fire in which this product is involved.
Other Information	STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal	Recover the product by sweeping up or vacuuming without raising dust. Collect spilled material and waste in sealable open-top type containers for disposal.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.

7. HANDLING AND STORAGE

Precautions for Safe Handling	Avoid generating dusts while handling the product and mixing.
Conditions for Safe Storage	Store in the closed, original container in a dry, well ventilated area, as cool as possible. Do not store for prolonged periods in direct sunlight. Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.
Other Information	Equipment that has been used for this chemical should not be used for the application of other materials to sensitive plants, unless it has been washed with chlorine bleach solution as directed on the label. Always read the label and any attached leaflet before use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	Name	STEL		TWA		Footnote
		mg/m3	ppm	mg/m3	ppm	
	Silica, amorphous precipitated			10		
	Kaolin clay			10		
Engineering Controls	Handle in well ventilated areas, generally natural ventilation is adequate.					
Personal Protective Equipment	It is good practice to wear suitable personal protective equipment (PPE). 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 PVC gloves and 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	Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.					

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Solid
Appearance	Off-white to tan granules
Solubility in Water	Disperses in water.
Vapour Pressure	3.3 x 10 ⁻⁷ mPa (25°C, metsulfuron methyl)
Octanol/Water Partition Coefficient	Kow Log P is 0.0018 (pH7, 25°C for metsulfuron methyl)
Flammability	Non combustible material.
Other Information	pKa is 3.8 (20°C, metsulfuron methyl)



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10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions. Hydrolyses at pH <7.
Hazardous Reactions	Keep away from strong oxidising agents.
Hazardous Polymerization	Hazardous polymerisation is not possible.

11. TOXICOLOGICAL INFORMATION

Inhalation	Not a likely route of exposure when handling the concentrate. May cause irritation to mucous membranes.
Ingestion	Low toxicity. However, swallowing large amounts of concentrate may cause nausea and vomiting.
Skin	May irritate the skin.
Eye	The concentrate may cause irritation of the eyes.
Chronic Effects	Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.
Acute Toxicity - Oral	LD50 (rat) >5000 mg/kg for metsulfuron methyl
Acute Toxicity - Dermal	LD50 (rabbit) >2000 mg/kg for metsulfuron methyl
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >5 mg/l for metsulfuron methyl
Eye Irritation	Mild eye irritant.
Skin Irritation	Mild skin irritant.
Skin Sensitisation	Product is not a skin sensitiser.
Other Information	The Australian Acceptable Daily Intake (ADI) for metsulfuron methyl 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 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 Office of Chemical Safety, 'ADI List', December 2008).

12. ECOLOGICAL INFORMATION

Persistence / Degradability	Half life in soil is typically 52 days.
Other Precautions	Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
Environ. Protection	Spray drift should be avoided, read the label for more information. Do NOT apply, drain or flush equipment on or near desirable trees or other plants, or on an area where their roots extend, or in locations where the chemical may be washed or moved into contact with their roots.
Acute Toxicity - Fish	LC50 (96hr) for rainbow trout and bluegill sunfish is >150 mg/l for metsulfuron methyl
Acute Toxicity - Daphnia	EC50 (48hr) for daphnia is >120 mg/l for metsulfuron methyl.
Acute Toxicity - Algae	EC50 (72hr) for algae 0.045 mg/l.
Acute Toxicity - Other Organisms	The following data is for the active ingredient, metsulfuron methyl. Birds: Not toxic to birds. LD50 for mallard duck is >2510 mg/kg LD50 for bobwhite quail is >5620 mg/kg Bees: Not toxic to bees. LD50 >44.3 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 (ChemClear®).
Container Disposal	Do not use this container for any other purpose. Triple or preferably pressure rinse containers before disposal. Add rinsings



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to the spray tank.
Dispose of in accordance with local regulations.
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

Storage and Transport Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.
For bulk shipments as Class 9, use UN 3077, HazChem code 2Z.

UN Number (Sea Transport) 3077

IMO Class/Packing Group Class 9

IMO Marine Pollutant Marine pollutant.

IMO Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(contains metsulfuron-methyl)

15. REGULATORY INFORMATION

Poisons Schedule Not Scheduled

Packaging & Labelling READ SAFETY DIRECTIONS BEFORE OPENING OR USING

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

16. OTHER INFORMATION

Date of preparation or last revision of MSDS Revised 01/10/2009

Contact Person/Point Normal Hours: Mr Volker Maier Phone: +61 3 9282 1000
After Hours: Shift Supervisor Phone: 1800 033 498

Revisions Highlighted The MSDS was reviewed. Minor changes were made to the information.
Section 12 - algae tox data added.
Section 14 - IMDG information added.
...End Of MSDS...

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