

Infosafe No™ 3NU73	Issue Date : August 2016	ISSUED by NUFARM
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 Product Name **ASSOCIATE Herbicide**

Not classified as hazardous

## 1. Identification

<b>GHS Product Identifier</b>	ASSOCIATE Herbicide
<b>Product Code</b>	0095
<b>Product Type</b>	Group B Herbicide
<b>Company Name</b>	NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
<b>Address</b>	103-105 Pipe Road Laverton North Victoria 3026 Australia
<b>Telephone/Fax Number</b>	Tel: +61 3 9282-1000 Fax: +61 3 9282-1001
<b>Emergency phone number</b>	1800 033 498 (24hr Australia)
<b>Recommended use of the chemical and restrictions on use</b>	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.
<b>Other Information</b>	This Safety Data Sheet describes the properties of the concentrated product. The physical properties and the assessments may not apply to the properties of the product once it has been diluted for application.

## 2. Hazard Identification

<b>GHS classification of the substance/mixture</b>	Not classified as hazardous under the GHS criteria. NON-DANGEROUS GOODS. Dangerous goods classification according to the Australia Dangerous Goods Code.
<b>Signal Word (s)</b>	AC1 Hazardous to the Aquatic Environment - Long-Term Hazard: Category 1 WARNING
<b>Hazard Statement (s)</b>	H410 Very toxic to aquatic life with long lasting effects.
<b>General Precautionary Statement (s)</b>	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use.
<b>Pictogram (s)</b>	Environment, The below pictograms are GHS Hazard symbols for workplace use only. See SECTION 14 for Dangerous Goods information.



<b>Other Information</b>	Poisons Schedule : Not Scheduled
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## 3. Composition/information on ingredients

<b>Chemical Characterization</b>	Solid		
<b>Ingredients</b>	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Metsulfuron Methyl	74223-64-6	600g/kg
	Kaolin clay	1332-58-7	155g/kg
	Silica, amorphous precipitated	112926-00-8	20g/kg
	Other ingredients (non-hazardous)		Balance

## 4. First-aid measures

<b>Inhalation</b>	Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.
<b>Ingestion</b>	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.

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**Skin** Wash affected areas thoroughly with soap and water.  
Remove contaminated clothing and launder before re-use.

**Eye contact** 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

**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, including any incompatibilities** 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

Occupational exposure limit values	Name	STEL		TWA		Footnote
		mg/m3	ppm	mg/m3	ppm	
	Silica, amorphous precipitated			10		
	Kaolin clay			10		
<b>Appropriate engineering controls</b>	Handle in well ventilated areas, generally natural ventilation is adequate.					
<b>Personal Protective Equipment</b>	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.					
<b>Hygiene Measures</b>	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.					
<b>Requirements Concerning Special Training</b>	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

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

## 10. Stability and reactivity

<b>Chemical Stability</b>	Stable under normal conditions. Hydrolyses at pH <7.
<b>Possibility of hazardous reactions</b>	Keep away from strong oxidising agents.
<b>Hazardous Polymerization</b>	Hazardous polymerisation is not possible.

## 11. Toxicological Information

<b>Acute Toxicity - Oral</b>	LD50 (rat) >5000 mg/kg for metsulfuron methyl
<b>Acute Toxicity - Dermal</b>	LD50 (rabbit) >2000 mg/kg for metsulfuron methyl
<b>Acute Toxicity - Inhalation</b>	LC50 (rat) (4hr) >5 mg/l for metsulfuron methyl
<b>Ingestion</b>	Low toxicity. However, swallowing large amounts of concentrate may cause nausea and vomiting.
<b>Inhalation</b>	Not a likely route of exposure when handling the concentrate. May cause irritation to mucous membranes.
<b>Skin</b>	May irritate the skin.
<b>Eye</b>	The concentrate may cause irritation of the eyes.
<b>Skin Sensitisation</b>	Product is not a skin sensitiser.
<b>Chronic Effects</b>	Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.
<b>Serious eye damage/irritation</b>	Mild eye irritant.
<b>Skin corrosion/irritation</b>	Mild skin irritant.
<b>Other Information</b>	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: Aust Govt Dept. of Health, Office of Chemical Safety, 'ADI List', December 2015).

## 12. Ecological information

<b>Persistence and degradability</b>	Half life in soil is typically 52 days.
<b>Other Precautions</b>	Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
<b>Environmental Protection</b>	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.
<b>Acute Toxicity - Fish</b>	LC50 (96hr) for rainbow trout and bluegill sunfish is >150 mg/l for metsulfuron methyl
<b>Acute Toxicity - Daphnia</b>	EC50 (48hr) for daphnia is >120 mg/l for metsulfuron methyl.

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<b>Acute Toxicity - Algae</b>	EC50 (72hr) for algae 0.045 mg/l.
<b>Acute Toxicity - Other Organisms</b>	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

<b>Product Disposal</b>	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®).
<b>Container Disposal</b>	Do not use this container for any other purpose. Triple or preferably pressure rinse containers before disposal. Add rinsings to the spray tank. Dispose of in accordance with local regulations. 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

<b>Storage and Transport</b>	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.
<b>UN Number (Sea Transport)</b>	3077
<b>IMO Class/Packing Group</b>	Class 9
<b>IMO Marine Pollutant</b>	Marine pollutant.
<b>IMO Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains metsulfuron-methyl 60%)

### 15. Regulatory information

<b>Regulatory Information</b>	Australia: WHS regulations (2011) - Schedule 11: classification not listed.
<b>Poisons Schedule</b>	Not Scheduled
<b>Packaging &amp; Labelling</b>	READ SAFETY DIRECTIONS BEFORE OPENING OR USING
<b>Other Information</b>	This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA). APVMA product number: 46361.

### 16. Other Information

<b>Date of preparation or last revision of SDS</b>	Revised 29/08/2016 This SDS replaces document dated May 2013.
<b>Contact Person/Point</b>	Normal Hours: Mrs Kathleen Marsh Phone: +61 3 9282 1000 After Hours: Shift Supervisor Phone: 1800 033 498
<b>Revisions Highlighted</b>	The MSDS was reviewed. Minor changes were made to the information. Updated Label received. ...End Of MSDS...

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