

Infosafe No™ 3NU72	Issue Date : August 2020	ISSUED by NUFARM
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 Product Name **MAKO HERBICIDE**

Classified as hazardous

## 1. Identification

<b>GHS Product Identifier</b>	MAKO HERBICIDE
<b>Product Code</b>	4114
<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
<b>Emergency phone number</b>	1800 033 498 (24hr Australia)
<b>E-mail Address</b>	sdsanz@nufarm.com
<b>Recommended use of the chemical and restrictions on use</b>	For the control of certain annual and perennial grasses and broadleaf weeds in commercial and industrial areas: around agricultural buildings and rights of way 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>	ED1 Eye Damage/Irritation: Category 1 SC-2 Skin Corrosion/Irritation: Category 2 AA1 Hazardous to the Aquatic Environment - Acute Hazard: Category 1 AC1 Hazardous to the Aquatic Environment - Long-Term Hazard: Category 1
<b>Signal Word (s)</b>	DANGER
<b>Hazard Statement (s)</b>	H318 Causes serious eye damage. H315 Causes skin irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.
<b>Precautionary statement – General</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>	Corrosion, Environment, The below pictograms are GHS Hazard symbols for workplace use only. See SECTION 14 for Dangerous Goods information.
	 
<b>Precautionary statement – Prevention</b>	P280 Wear protective gloves, clothing, eye and face protection. P264 Wash hands and exposed skin thoroughly after handling.
<b>Precautionary statement – Response</b>	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P332+P313 If skin irritation occurs: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse. P391 Collect spillage.
<b>Other Information</b>	Poisons Schedule S5

## 3. Composition/information on ingredients

Ingredients	Name	CAS	Proportion
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Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Sulfometuron methyl	74222-97-2	750 g/kg
	Other ingredients (non-hazardous)		10-30 %
	Anionic surfactant	N/A	0-10 %
	Kaolin clay	1332-58-7	0-10 %

#### 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.
<b>Skin</b>	Wash affected areas thoroughly with soap and water. Remove contaminated clothing and launder before re-use.
<b>Eye contact</b>	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.
<b>First Aid Facilities</b>	If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.
<b>Advice to Doctor</b>	Treat symptomatically.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.
<b>Special Protective Equipment for fire fighters</b>	Breathable air apparatus must be worn when fighting a fire in which this product is involved.
<b>Other Information</b>	STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

#### 6. Accidental release measures

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

#### 7. Handling and storage

<b>Precautions for Safe Handling</b>	Avoid generating dusts while handling the product and mixing.
<b>Conditions for safe storage, including any incompatibilities</b>	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.
<b>Other Information</b>	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	<u>Name</u>	<u>STEL</u>		<u>TWA</u>		<u>Footnote</u>
		<u>mg/m3</u>	<u>ppm</u>	<u>mg/m3</u>	<u>ppm</u>	
	Kaolin clay			10		
<b>Appropriate engineering controls</b>	Handle in well ventilated areas, generally natural ventilation is adequate.					
<b>Personal Protective Equipment</b>	When opening the container, preparing product for use and using the prepared product, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), elbow-length chemical resistant gloves, goggles and a half face piece respirator.					

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<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

<b>Form</b>	Solid
<b>Appearance</b>	Off-white granules
<b>Solubility in Water</b>	Disperses in water.
<b>Vapour Pressure</b>	7.3 x 10 <sup>-11</sup> mPa (25°C, sulfometuron methyl)
<b>Partition Coefficient: n-octanol/water</b>	Kow Log P is 1.18 (pH5); -0.51 (pH7)
<b>Flammability</b>	Non combustible material Handling large quantities of this product, associated with industrial processing, may be a dust explosion hazard.
<b>Other Information</b>	pKa is 5.2

## 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 sulfometuron-methyl
<b>Acute Toxicity - Dermal</b>	LD50 (rabbit) >2000 mg/kg for sulfometuron-methyl
<b>Acute Toxicity - Inhalation</b>	LC50 (rat) (4hr) >11 mg/l for sulfometuron-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>	A severe eye irritant.
<b>Skin Sensitisation</b>	Product is not a skin sensitiser.
<b>Reproductive Toxicity</b>	No such effects have been observed in the absence of maternal toxicity.
<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>	This product is a severe eye irritant.
<b>Skin corrosion/irritation</b>	Moderate skin irritant.
<b>Other Information</b>	The Australian Acceptable Daily Intake (ADI) for sulfometuron-methyl for a human is 0.02 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 2.5 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 2014).

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## 12. Ecological information

<b>Persistence and degradability</b>	Half life in soil is typically 28 days.
<b>Environmental Protection</b>	<p>Spray drift can cause damage, read the label for more information.</p> <p>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.</p> <p>Do NOT contaminate any body of water by spraying, cleaning of equipment, disposal of waste, including chemical or used containers, or run-off from treated areas. If accidental contamination does occur, the water must not be used for irrigation.</p> <p>Marine pollutant.</p>
<b>Acute Toxicity - Fish</b>	LC50 (96hr) for rainbow trout and bluegill sunfish is >12.5 mg/l for sulfometuron-methyl
<b>Acute Toxicity - Daphnia</b>	LC50 >12.5 ppm
<b>Acute Toxicity - Algae</b>	EC50 for algae is 0.0046 mg/l.
<b>Acute Toxicity - Other Organisms</b>	<p>The following data is for the active ingredient, sulfometuron-methyl.</p> <p>Birds: Not toxic to birds. LD50 for mallard ducks is &gt;5000 mg/kg</p> <p>LD50 for bobwhite quail is &gt;5620 mg/kg</p> <p>Bees: Not toxic to bees. LD50 &gt;100 µg/bee.</p>

## 13. Disposal considerations

<b>Container Disposal</b>	<p>Do not use this container for any other purpose.</p> <p>Triple or preferably pressure rinse containers before disposal. Add rinsings to the spray tank.</p> <p>Do not dispose of undiluted chemicals on site.</p> <p>If recycling, replace cap and return clean containers to recycler or designated collection point.</p> <p>If not recycling, puncture or shred and bury containers in local authority landfill.</p> <p>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.</p> <p>Empty containers and product should not be burnt.</p>
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## 14. Transport information

<b>Storage and Transport</b>	UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (contains sulfometuron methyl) Class 9 PG III MARINE POLLUTANT ADG Code: Not a dangerous good in packs <500kg (Special Provision AU001) IATA Code: Not restricted for transport when 5kg or less (Special Provision A197)
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## 15. Regulatory information

<b>Poisons Schedule</b>	S5
<b>Packaging &amp; Labelling</b>	CAUTION KEEP OUT OF REACH OF CHILDREN 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: 51666.

## 16. Other Information

<b>Date of preparation or last revision of SDS</b>	Revised 20/08/2020.
<b>Contact Person/Point</b>	Normal Hours: SDS Coordinator Phone: +61 3 9282 1000 Email : SDSANZ@nufarm.com
<b>Revisions Highlighted</b>	Product is classified as hazardous under the GHS criteria.



# Safety Data Sheet

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