

## NUFARM ASSOCIATE

Infosafe No.: 3NU73  
ISSUED Date : 17/01/2023  
ISSUED by: NUFARM AUSTRALIA LIMITED.

### Section 1 - Identification

---

**Product Identifier**

NUFARM ASSOCIATE

**Product Code**

0095

**Product Type**

Group 2 Herbicide

**Company Name**

NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)

**Address**

103-105 Pipe Road Laverton North  
Victoria 3026 AUSTRALIA

**Telephone/Fax Number**

Tel: +61 3 9282-1000

Fax: +61 3 9282-1001

**Emergency Phone Number**

1800 033 498 (24hr Australia)

**Emergency Contact Name**

www.nufarm.com.au

**E-mail Address**

SDSANZ@nufarm.com

**Recommended use of the chemical and restrictions on 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.

### Section 2 - Hazard(s) Identification

---

**GHS classification of the substance/mixture**

Not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Complies with the requirements of Special Provision AU01 and therefore exempted from being classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Classified as Dangerous Goods according to International Maritime Dangerous Goods Code (IMDG) and International Air Transport Association (IATA).

Hazardous to the Aquatic Environment - Acute Hazard: Category 1

Hazardous to the Aquatic Environment - Long-Term Hazard: Category 1

**Signal Word (s)**

WARNING

**Hazard Statement (s)**

H410 Very toxic to aquatic life with long lasting effects.

**Pictogram (s)**

Environment

**Precautionary Statement–Prevention**

P273 Avoid release to the environment.

**Precautionary Statement–Response**

P391 Collect spillage.

**Precautionary Statement–Disposal**

P501 Dispose of contents/container to an approved waste disposal plant.

**Precautionary Statement–General**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

### Section 3 - Composition and Information on Ingredients

**Ingredients**

Name	CAS	Proportion
metsulfuron-methyl (ISO)	74223-64-6	600 g/kg
Kaolin clay	1332-58-7	155 g/kg
Silica, amorphous precipitated	112926-00-8	20 g/kg
Ingredients determined not to be hazardous		Balance

### Section 4 - First Aid Measures

**Inhalation**

If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.

**Ingestion**

Do not induce vomiting. Wash out mouth thoroughly with water. Seek medical attention.

**Skin**

Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

**Eye**

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist seek medical attention.

**First Aid Facilities**

Eyewash and normal washroom facilities.

**Advice to Doctor**

Treat symptomatically.

**Other Information**

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

### Section 5 - Firefighting Measures

**Suitable Extinguishing Media**

Use appropriate fire extinguisher for surrounding environment.

**Hazards from Combustion Products**

This product is non combustible.

### **Specific hazards arising from the chemical**

This product is non combustible.

### **Special Protective Equipment and Precautions for Firefighters**

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

### **Hazchem Code**

2Z

### **Decomposition Temperature**

Not available

## **Section 6 - Accidental Release Measures**

---

### **Emergency Procedures**

Increase ventilation. Evacuate all unprotected personnel. Wear sufficient respiratory protection and full protective clothing to prevent exposure. Sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust, then transfer material to a suitable container. Wash surfaces well with soap and water. Seal all wastes in labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

## **Section 7 - Handling and Storage**

---

### **Precautions for Safe Handling**

Avoid inhalation of dust, and skin or eye contact. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of dust in the work atmosphere. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities. Always read the label and any attached leaflet before use. 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.

### **Conditions for safe storage, including any incompatibilities**

Store in a cool, dry, well-ventilated area, out of direct sunlight and moisture. Store in suitable, labelled containers. Keep containers tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

## **Section 8 - Exposure Controls and Personal Protection**

---

### **Occupational exposure limit values**

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Kaolin clay

TWA: 10 mg/m<sup>3</sup>

Silica, amorphous precipitated

TWA: 10 mg/m<sup>3</sup>

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

Source: Safe Work Australia

### **Biological Monitoring**

No biological limits allocated.

### **Control Banding**

Not available

### **Engineering Controls**

Use with good general ventilation. If dusts are produced, local exhaust ventilation should be used.

### **Respiratory Protection**

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable

dust/particulate filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

#### Eye and Face Protection

Safety glasses with full face shield should be used. Eye protection devices should conform to relevant regulations.

Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 (series) - Eye Protectors for Industrial Applications.

#### Hand Protection

Wear gloves of impervious material such as PVC. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

#### Thermal Hazards

No further relevant information available.

#### Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

#### 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.

## Section 9 - Physical and Chemical Properties

Properties	Description	Properties	Description
Form	Solid	Appearance	Off-white to tan granules
Colour	Off-white to tan	Odour	Not available
Melting Point	Not available	Boiling Point	Not available
Decomposition Temperature	Not available	Solubility in Water	Disperses in water.
Specific Gravity	Not available	pH	Not available
Vapour Pressure	3.3 x 10 <sup>-7</sup> mPa (25°C, metsulfuron methyl)	Relative Vapour Density (Air=1)	Not available
Evaporation Rate	Not available	Odour Threshold	Not available
Viscosity	Not available	Volatile Component	Not available
Flash Point	Not available	Flammability	Non combustible material
Auto-Ignition Temperature	Not available	Flammable Limits - Lower	Not available
Flammable Limits - Upper	Not available	Explosion Properties	Not available
Oxidising Properties	Not available	Particle Characteristics	Not available

#### Other Information

pKa is 3.8 (20°C, metsulfuron methyl)

## Section 10 - Stability and Reactivity

#### Reactivity

Reacts with incompatible materials.

#### Chemical Stability

Stable under normal conditions of storage and handling. Hydrolyses at pH <7.

#### Possibility of hazardous reactions

Reacts with incompatible materials.

**Conditions to Avoid**

Extremes of temperature and direct sunlight.

**Incompatible Materials**

Keep away from strong oxidising agents.

**Hazardous Decomposition Products**

Thermal decomposition may result in the release of toxic and/or irritating fumes.

**Hazardous Polymerization**

Will not occur.

**Section 11 - Toxicological Information**

---

**Toxicology Information**

No toxicity data available for this material. The available acute toxicity data for the ingredients are given below.

**Acute Toxicity - Oral**

Metsulfuron methyl

LD50 (rat): >5000 mg/kg

**Acute Toxicity - Dermal**

Metsulfuron methyl

LD50 (rabbit): >2000 mg/kg

**Acute Toxicity - Inhalation**

Metsulfuron methyl

LC50 (rat): >5 mg/l/4h

**Ingestion**

Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

**Inhalation**

Inhalation of dusts may irritate the respiratory system.

**Skin**

May be irritating to skin. The symptoms may include redness and itching.

**Eye**

May be irritating to eyes. The symptoms may include redness, itching and tearing.

**Respiratory Sensitisation**

Not expected to be a respiratory sensitiser.

**Skin Sensitisation**

Not expected to be a skin sensitiser.

**Germ Cell Mutagenicity**

Not considered to be a mutagenic hazard.

**Carcinogenicity**

Not considered to be a carcinogenic hazard.

Silica, amorphous precipitated is listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

**Reproductive Toxicity**

Not considered to be toxic to reproduction.

**STOT - Single Exposure**

Not expected to cause toxicity to a specific target organ.

**STOT - Repeated Exposure**

Not expected to cause toxicity to a specific target organ.

**Aspiration Hazard**

Not expected to be an aspiration hazard.

### 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: Australian Pesticides and Veterinary Medicines Authority (APVMA) December 2022.)

## Section 12 - Ecological Information

---

### Ecotoxicity

Very toxic to aquatic life with long lasting effects.

The available ecological data is given below.

### Persistence and degradability

Half life in soil is typically 52 days.

### Mobility

Not available

### Bioaccumulative Potential

Not available

### Environmental Protection

Do not discharge this material into waterways, drains and sewers.

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

Metsulfuron methyl

LC50 (rainbow trout and bluegill sunfish): >150 mg/l/96h

### Acute Toxicity - Daphnia

Metsulfuron methyl

EC50: >120 mg/l/48h

### Acute Toxicity - Algae

Metsulfuron methyl

EC50: 0.045 mg/l/72h.

### Acute Toxicity - Other Organisms

Metsulfuron methyl

Birds: Not toxic to birds.

LD50 (mallard duck): >2510 mg/kg

LD50 (bobwhite quail): >5620 mg/kg

Bees: Not toxic to bees.

LD50 >44.3 µg/bee.

### Hazardous to the Ozone Layer

This product is not expected to deplete the ozone layer.

## Section 13 - Disposal Considerations

---

### Disposal Considerations

Dispose of waste according to applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. To minimise personal exposure, refer to Section 8 - Exposure Controls and Personal Protection.

### 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 and Methods

Do not use this container for any other purpose.

drumMUSTER is the national program for the collection and recycling of empty, cleaned, non returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMUSTER symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program.

Returnable containers: empty contents fully into application equipment. Replace cap, close all valves and return to the point of supply for refill or storage.

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.

If recycling, replace cap and return clean containers to recycler or designated collection point.

Triple or preferably pressure rinse containers before disposal. Add rinsings to the spray tank.

## Section 14 - Transport Information

---

### Transport Information

Road and Rail Transport (ADG Code):

This product complies with the requirements of Special Provision AU01 and is therefore exempted from being classified as Dangerous Goods according to the ADG Code.

Note: Special Provision AU01:

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in: packagings that do not incorporate a receptacle exceeding 500 kg(L); or IBCs.

Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Class/Division: 9

UN No: 3077

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains Metsulfuron Methyl) MARINE POLLUTANT

Packing Group: III

EMS: F-A, S-F

Special Provisions: 274, 335, 966, 967, 969

Air Transport (ICAO/IATA):

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Class/Division: 9

UN No: 3077

Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s.(Contains Metsulfuron Methyl)

Packing Group: III

Label: Miscellaneous, Environmentally hazardous

Packaging Instructions (passenger & cargo): 956

Packaging Instructions (cargo only): 956

Special provisions: A97, A158, A179, A197, A215

### UN Number

None Allocated

### Proper Shipping Name

None Allocated

### Transport Hazard Class

None Allocated

### Hazchem Code

2Z

### Special Precautions for User

Not available

### IMDG Marine pollutant

Yes

### Transport in Bulk

For bulk shipments as Class 9, use UN 3077, HazChem code 2Z.

## Section 15 - Regulatory Information

---

### Regulatory Information

Not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.

Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

WHS regulations (2011) - Schedule 11: classification not listed.

### Poisons Schedule

Not Scheduled

### Montreal Protocol

Not listed

### Stockholm Convention

Not listed

### Rotterdam Convention

Not listed

### International Convention for the Prevention of Pollution from Ships (MARPOL)

Not available

### Agricultural and Veterinary Chemicals Act 1994

APVMA product number: 46361.

This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA).

### Basel Convention

Not listed

## Section 16 - Any Other Relevant Information

---

### Date of Preparation

SDS Amended: January 2024, Product Identifier and Product Type updated.

SDS Reviewed: January 2023

Supersedes: August 2021

### Version Number

3.1

### Literature References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Code of Practice for Supply Diversion into Illicit Drug Manufacture.

National Code of Practice for Chemicals of Security Concern.

Agricultural Compounds and Veterinary Chemicals Act.

International Agency for Research on Cancer (IARC) Monographs.

Montreal Protocol on Substances that Deplete the Ozone Layer.

Stockholm Convention on Persistent Organic Pollutants (POPs).

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

International Air Transport Association (IATA) Dangerous Goods Regulations.

International Maritime Dangerous Goods (IMDG) Code.

Workplace exposure standards for airborne contaminants.

Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of Classification and Labelling of Chemicals (7th revised edition).

Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

### Contact Person/Point

Normal hours: SDS coordinator : Phone +61 3 9282 1000

After hours: Shift supervisor : Phone 1800 033 498

## END OF SDS

© Copyright Chemical Safety International Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

The compilation of SDS's displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copying of any SDS displayed is permitted for personal use only and otherwise is not permitted. In particular the SDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of SDS without the express written consent of Chemical Safety International Pty Ltd.