

SAFETY DATA SHEET

According to Safe Work Australia

1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: GENFARM GLUFOSINATE 200 HERBICIDE

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use: Agricultural herbicide

Details of Manufacturer or Importer:

Landmark Operations Limited
Suite 3, Level 1, Building B
11 Talavera Road
Macquarie Park NSW 2113

Phone Number: 02 9889 5400

Emergency telephone number: National Poison Information Centre: 13 11 26

2 . HAZARDS IDENTIFICATION

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)



health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



STOT SE 3 H336 May cause drowsiness or dizziness.

Signal Word Warning

Hazard Statements

H361 Suspected of damaging fertility or the unborn child.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P271 Use only outdoors or in a well-ventilated area.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national regulations.

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3 . COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:

77182-82-2	Glufosinate ammonium (ISO) ⚠ Repr. 1B, H360; STOT RE 2, H373; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	20%
107-98-2	1-Methoxy-2-propanol [Monopropylene glycol methyl ether] ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	11%

4 . FIRST AID MEASURES

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

Eye Contact:

In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Seek immediate medical attention.

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May cause mild irritation, drowsiness and dizziness.

Skin Contact: May cause skin irritation, itchiness and reddening.

Eye Contact: May cause eye irritation, stinging, reddening and watering.

Ingestion: May cause irritation, reddening and burning sensation to mouth and throat.

5 . FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Use fire extinguishing methods suitable to surrounding conditions.

Specific Hazards Arising from the Chemical:

During heating or in case of fire oxides of carbon, nitrogen, oxides of nitrogen, other nitrogen compounds, hydrogen cyanide, oxides of phosphorous, other phosphorous compounds, smoke and water may be produced.

The product is not combustible.

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 . ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

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Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. If absorbent material is not available or spill is too large, create a dike to stop spill from spreading. Collect the spilled material and place into a suitable container for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep in original container, tightly closed when not in use. Protect from direct sunlight. Keep away from strong oxidising agents, strong acids and strong bases.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:

107-98-2 1-Methoxy-2-propanol [Monopropylene glycol methyl ether]

NES	STEL: 553 mg/m ³ , 150 ppm TWA: 369 mg/m ³ , 100 ppm
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Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour below occupational exposure standards.

Respiratory Protection:

Use an approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

PVC or butyl rubber gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Form:	Liquid
Colour:	Blue
Odour:	Slightly pungent odour
Odour Threshold:	No information available
pH-Value:	6.0-8.0

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Melting point/Melting range:	<0 °C
Initial Boiling Point/Boiling Range:	~96 °C (at 100 kPa)
Flash Point:	Not applicable
Flammability:	Product is not flammable.
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure at 20 °C:	2.37 kPa (water vapour pressure)
Relative Density at 20 °C:	1.10
Vapour Density:	As for water
Evaporation Rate:	As for water
Solubility in Water:	Completely soluble
Partition Coefficient (n-octanol/water) at 22 °C:	<0.1 log POW (at pH 7)

10 . STABILITY AND REACTIVITY

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Direct sunlight.

Incompatible Materials: Strong oxidising agents, strong acids and strong bases.

Hazardous Decomposition Products:

Oxides of carbon, nitrogen, oxides of nitrogen, other nitrogen compounds, hydrogen cyanide, oxides of phosphorous, other phosphorous compounds, smoke and water.

11 . TOXICOLOGICAL INFORMATION

Toxicity:

LD₅₀/LC₅₀ Values Relevant for Classification:

107-98-2 1-Methoxy-2-propanol [Monopropylene glycol methyl ether]

Oral	LD ₅₀	5660 mg/kg (rat)
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Dermal	LD ₅₀	13000 mg/kg (rabbit)
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77182-82-2 Glufosinate ammonium (ISO)

Oral	LD ₅₀	1910-2170 mg/kg (rat)
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Formulated Product:

LD50 Oral 1910-2170 mg/kg (rat)

LC50 Inhalation/ 4 h 3.22-4.31 mg/L (rat)

Acute Health Effects

Inhalation: May cause mild irritation, drowsiness and dizziness.

Skin: May cause skin irritation, itchiness and reddening.

Eye:

May cause eye irritation, stinging, reddening and watering. Prolonged exposure or delayed treatment may cause permanent eye damage.

Ingestion: May cause irritation, redening and burning sensation to mouth and throat.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.

Serious Eye Damage / Irritation: Based on classification principles, the classification criteria are not met.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

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Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity:

Glufosinate ammonium (ISO) is classified by Safe Work Australia as Toxic to Reproduction Category 3. Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity (STOT) - Single Exposure: May cause drowsiness and dizziness.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

May cause damage to organs through prolonged or repeated exposure through inhalation and if swallowed.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

Chronic Health Effects: Prolonged exposure or delayed treatment may cause permanent eye damage.

Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information:

The Australian Acceptable Daily Intake (ADI) for glufosinate ammonium for a human is 0.02 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 2.1 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', June 2014).

12 . ECOLOGICAL INFORMATION

Ecotoxicity:

Glufosinate ammonium (ISO):
LC50 /8 day dietary >5000 mg/kg (japanese quail)

Aquatic toxicity:

77182-82-2 Glufosinate ammonium (ISO)

EC ₅₀	560-1000 mg/L (daphnia)
LC ₅₀	710 mg/L (rainbow trout)
	>1000 mg/L (bluegill)
	>1000 mg/L (carp)
	>1000 mg/L (golden orfe)
LD ₅₀	≥1000 mg/L (scenedesmus subspicatus)
	37 mg/L (senastrum capricornutum)

Harmful to aquatic organisms.

Persistence and Degradability: Biodegradable. Will not accumulate in soils or water.

Bioaccumulative Potential: Bioaccumulation is not expected to occur.

Mobility in Soil: No information available

Other adverse effects: No information available

13 . DISPOSAL CONSIDERATIONS

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:

Please consult your state Land Waste Management Authority for more information.

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14 . TRANSPORT INFORMATION

UN Number Not regulated
Proper Shipping Name Not regulated
Dangerous Goods Class Not regulated
Packing Group: Not regulated
Marine pollutant: No

15 . REGULATORY INFORMATION

Australian Inventory of Chemical Substances:

77182-82-2	Glufosinate ammonium (ISO)
107-98-2	1-Methoxy-2-propanol [Monopropylene glycol methyl ether]

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:
Poisons Schedule: 5

16 . OTHER INFORMATION

Date of Preparation or Last Revision: 13.07.2015

Prepared by: MSDS.COM.AU Pty Ltd

www.msds.com.au

Abbreviations and acronyms:

GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC₅₀: Lethal concentration, 50 percent
LD₅₀: Lethal dose, 50 percent
IARC: International Agency for Research on Cancer
STEL: Short Term Exposure Limit
TWA: Time Weighted Average
NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - December 2011"

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