



# SAFETY DATA SHEET

## BROMICIDE 200 SELECTIVE HERBICIDE

Infosafe No.: NU0CZ  
ISSUED Date : 15/03/2023  
ISSUED by: NUFARM AUSTRALIA LIMITED.

### Section 1 - Identification

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**Product Identifier**

BROMICIDE 200 SELECTIVE HERBICIDE

**Product Code**

0235

**Product Type**

Group C 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 weeds in wheat, oats, barley, cereal rye and triticale (alone or undersown) grain sorghum, linseed, clover and lucerne pastures, turf, fallow, non-crop, roadsides and rights-of-way as per the Directions for Use table on the label.

### Section 2 - Hazard(s) Identification

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**GHS classification of the substance/mixture**

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).

Flammable liquids: Category 4

Acute toxicity: Category 4 - Oral

Acute toxicity: Category 3 - Inhalation

Skin corrosion/irritation: Category 2

Eye damage/irritation: Category 2A

Sensitisation - skin: Category 1

Carcinogenicity: Category 2

Reproductive toxicity: Category 2

Specific target organ toxicity (single exposure): Category 3 (Narcotic)

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

**Signal Word (s)**

DANGER

**Hazard Statement (s)**

H227 Combustible liquid.  
H302 Harmful if swallowed.  
H331 Toxic if inhaled.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H351 Suspected of causing cancer.  
H361 Suspected of damaging fertility or the unborn child.  
H304 May be fatal if swallowed and enters airways.  
H410 Very toxic to aquatic life with long lasting effects.

**Pictogram (s)**

Skull and crossbones, Health hazard, Environment



**Precautionary Statement – Prevention**

P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary Statement – Response**

P308+P313 IF exposed or concerned: Get medical advice/attention.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor  
P331 Do NOT induce vomiting.  
P330 Rinse mouth.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P311 Call a POISON CENTER/doctor.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P312 Call a POISON CENTER/doctor if you feel unwell.  
P370+P378 In case of fire: Use water fog, foam, carbon dioxide or dry chemical to extinguish.  
P391 Collect spillage.

**Precautionary Statement – Storage**

P403 Store in a well-ventilated place.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.

**Precautionary Statement – Disposal**

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

## Section 3 - Composition and Information on Ingredients

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### Ingredients

Name	CAS	Proportion
Solvent naphtha, petroleum, heavy aromatic	64742-94-5	648 g/L
bromoxynil octanoate (ISO)	1689-99-2	200 g/L
Ingredients determined not to be hazardous		Balance

## Section 4 - First Aid Measures

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### Inhalation

Avoid becoming a casualty - to protect rescuer, use air-viva, oxy-viva or one-way mask. Remove affected person from contaminated area - Apply artificial respiration if not breathing. Do not give direct mouth to mouth resuscitation. Resuscitate in a well ventilated area. Seek IMMEDIATE medical attention.

### Ingestion

Do NOT induce vomiting. Wash out mouth and lips with water. Where vomiting occurs naturally have affected person place head below hip level in order to reduce risk of aspiration. Seek immediate medical attention.

### Skin

Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. 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. Seek medical attention.

### First Aid Facilities

Eyewash, safety shower 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

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### Suitable Extinguishing Media

Water fog, foam, carbon dioxide or dry chemical.

### Unsuitable Extinguishing Media

Do not use water jet.

### Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including oxides of carbon and nitrogen, hydrogen chloride, hydrogen bromide and possibly other compounds of bromine, chlorine and nitrogen.

### Specific hazards arising from the chemical

Combustible. This product will burn if exposed to fire.

### Special Protective Equipment and Precautions for Firefighters

Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.

### Hazchem Code

•3Z

### Decomposition Temperature

Not available

## Section 6 - Accidental Release Measures

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### Emergency Procedures

Remove all sources of ignition. Evacuate all unprotected personnel. Do not allow contact with skin and eyes. Do not breathe mist/vapour. It is essential to wear self-contained breathing apparatus (S.C.B.A) and full personal protective equipment and clothing to prevent exposure. Avoid exposure to spillage by collecting the material using explosion proof vacuum and transfer into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to 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

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### Precautions for Safe Handling

Always read the label and any attached leaflet before use. Toxic and combustible liquid. Avoid exposure. Exposure without protection must be prevented. Wear appropriate personal protective equipment and clothing to prevent exposure. Use in designated areas with local exhaust ventilation. DO NOT store or use in confined spaces. Build up of mists or vapours in the atmosphere must be prevented. Avoid breathing in spray or mists or vapours. Do not use near ignition sources. Do not pressurise, cut, heat or weld containers as they may contain toxic residues. Do not empty into drains. Maintain high standards of personal hygiene i.e. washing hands prior to eating, drinking, smoking or using toilet facilities. Avoid exposure. Do not handle until all safety precautions have been read and understood. It is recommended that pregnant or breastfeeding women should not handle this product unless adequate exposure protection can be assured at all times. Female personnel planning pregnancy should be made aware of the potential risks.

### Conditions for safe storage, including any incompatibilities

This material is Toxic and must be stored, handled and maintained according to the appropriate regulations. Limit quantity in storage. Restrict access to storage area. Post appropriate warning signs. Consider leak detection and alarm systems, as required. Structural materials and lighting and ventilation systems in storage area should be corrosion resistant. Store in a cool, dry, well-ventilated area away from sources of ignition, oxidizing agents, strong mineral acids, bases metal and/or water.

Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations. For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids and AS/NZS 4452 - The storage and handling of toxic substances.

### Storage Regulations

Classified as a Class C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS1940 2017.

## Section 8 - Exposure Controls and Personal Protection

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### Occupational exposure limit values

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

Solvent naphtha, petroleum, heavy aromatic (Oil mist)

TWA: 5 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

This substance is toxic and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. Provide sufficient ventilation to keep airborne levels below the exposure limits or as low as possible. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flameproof exhaust ventilation system is required. Alternatively, a process enclosure system such as a fume cupboard should be employed.

### Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist 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 side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. 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.

## Section 9 - Physical and Chemical Properties

Properties	Description	Properties	Description
Form	Liquid	Appearance	Amber Liquid
Colour	Amber	Odour	Hydrocarbon odour
Melting Point	Not available	Boiling Point	178 - 209°C (for solvent)
Decomposition Temperature	Not available	Solubility in Water	Forms an emulsion
Specific Gravity	1.030	pH	5 (1% in water)
Vapour Pressure	0.19 mPa @ 25°C for bromoxynil octanoate	Relative Vapour Density (Air=1)	Not available
Evaporation Rate	Not available	Odour Threshold	Not available
Viscosity	Not available	Volatile Component	~60%
Partition Coefficient: n-octanol/water (log value)	Kow Log P is 5.4 for bromoxynil octanoate	Flash Point	68°C
Flammability	Combustible Liquid	Auto-Ignition Temperature	Not determined
Flammable Limits - Lower	0.6% for solvent	Flammable Limits - Upper	7.0% for solvent
Explosion Properties	No information	Oxidising Properties	Not available
Particle Characteristics	Not available		

## Section 10 - Stability and Reactivity

### Reactivity

Reacts with incompatible materials.

**Chemical Stability**

Stable under normal conditions of storage and handling.

**Possibility of hazardous reactions**

Keep away from strong oxidising agents, may react violently.

**Conditions to Avoid**

Heat, open flames and other sources of ignition.

**Incompatible Materials**

Strong oxidising agents.

**Hazardous Decomposition Products**

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including oxides of carbon and nitrogen, hydrogen chloride, hydrogen bromide and possibly other compounds of bromine, chlorine and nitrogen.

**Hazardous Polymerization**

Will not occur.

## Section 11 - Toxicological Information

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**Toxicology Information**

No toxicity data available for this material. The available acute toxicity data for the ingredient/s is/are given below.

**Acute Toxicity - Oral**

Bromoxynil octanoate  
LD50 (rat): 238 mg/kg

**Acute Toxicity - Dermal**

Bromoxynil octanoate  
LD50 (rat): >2000 mg/kg

**Acute Toxicity - Inhalation**

Bromoxynil octanoate  
LC50 (rat): 0.72 mg/l/4h

**Ingestion**

Harmful if swallowed. May be fatal if swallowed and enters airways. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause severe pulmonary injury that may lead to death. May cause irritation to the mouth, throat, esophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

**Inhalation**

Toxic if inhaled. Inhalation may cause headaches, impairment of judgement and in extreme cases can lead to unconsciousness or death. May cause irritation to the mucous membrane and upper airways, especially where vapours or mists are generated. Symptoms include sneezing, coughing, wheezing, shortness of breath, headache, dizziness, drowsiness, nausea and vomiting.

**Skin**

Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis. May cause an allergic skin reaction.

**Eye**

Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

**Respiratory Sensitisation**

Not expected to be a respiratory sensitiser.

**Skin Sensitisation**

May cause an allergic skin reaction.

**Germ Cell Mutagenicity**

Not considered to be a mutagenic hazard.

**Carcinogenicity**

Suspected of causing cancer. Classified as a suspected human carcinogen.

Highly refined mineral oil is listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

**Reproductive Toxicity**

Suspected of damaging fertility or the unborn child. Classified as a suspected human reproductive or developmental toxicant.

Bromoxynil octanoate has been classified as suspected of damaging fertility or the unborn child on the basis of studies, in rats,

rabbits and mice which show reduced ossification and increased incidence of supernumerary ribs at doses (range 5-15 mg/kg/day) which are not toxic maternally.

#### **STOT - Single Exposure**

May cause drowsiness or dizziness.

#### **STOT - Repeated Exposure**

Not expected to cause toxicity to a specific target organ.

#### **Aspiration Hazard**

May be fatal if swallowed and enters airways.

#### **Other Information**

The Australian Acceptable Daily Intake (ADI) for bromoxynil for a human is 0.003 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.3 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**

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#### **Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

No ecological data available for this material. The available ecological data for the ingredients is given below:

#### **Persistence and degradability**

Average soil half life of bromoxynil is 7 days.

#### **Mobility**

Not available

#### **Bioaccumulative Potential**

Not available

#### **Environmental Protection**

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

Spray drift can cause damage, read the label for more information.

#### **Acute Toxicity - Fish**

Bromoxynil octanoate

LC50 (rainbow trout): 0.041 mg/l/96h.

#### **Acute Toxicity - Daphnia**

Bromoxynil octanoate

LC50: 0.046 mg/l/48h.

#### **Acute Toxicity - Other Organisms**

Bees: Not toxic to bees. LD50 >100 µg/bee.

#### **Hazardous to the Ozone Layer**

This product is not expected to deplete the ozone layer.

## **Section 13 - Disposal Considerations**

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#### **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.

Empty containers and product should not be burnt.

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

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

If not recycling, break, crush or puncture and deliver empty packaging for appropriate disposal at an approved waste management facility.

If an approved waste management facility is not available, bury the empty packaging 500mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations.

## Section 14 - Transport Information

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### 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: 3082

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains Bromoxynil octanoate)(Marine Pollutant)

Packing Group: III

EMS: F-A, S-F

Special Provisions: 274, 335, 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: 3082

Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s.(Contains Bromoxynil octanoate)

Packing Group: III

Label: Miscellaneous

Packaging Instructions (passenger & cargo): 964

Packaging Instructions (cargo only): 964

Special provisions: A97, A158, A197, A215

### ADG U.N. Number

None Allocated

### ADG Proper Shipping Name

None Allocated

### ADG Transport Hazard Class

None Allocated

### Hazchem Code

•3Z

### Special Precautions for User

Not available

### IMDG Marine pollutant

Yes

### Transport in Bulk

For bulk shipments as Class 9, use UN 3082, HazChem code •3Z.

## Section 15 - Regulatory Information

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### Regulatory Information

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).  
WHS regulations (2011) - Schedule 11: Item 9 (flammable liquid category 4), Item 34 (Acute toxicity category 3 - Inhalation)

### Poisons Schedule

S6

### 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: 31614.

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

### Basel Convention

Not listed

## Section 16 - Any Other Relevant Information

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### Date of Preparation

SDS Reviewed March 2023

Supersedes: September 2018

### Version Number

3.0

### 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

### User Codes

User Title Label	User Codes
Field 4	Y

## END OF SDS

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