

Infosafe No™ NU017	Issue Date : March 2021	ISSUED by NUFARM
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 Product Name **BROMICIDE MA Selective Herbicide**

Classified as hazardous

1. Identification

GHS Product Identifier	BROMICIDE MA Selective Herbicide
Product Code	0220
Product Type	Group C I 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
Emergency phone number	1800 033 498 (24hr Australia)
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, triticale, linseed, grass pastures and turf as per the Directions for Use table on the label.
Other Information	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

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. Reproductive toxicity: Category 2 Skin sensitization: Category 1 Acute toxicity: Category 4 - Oral Acute toxicity: Category 4 - Inhalation Serious eye irritation: Category 1 Skin corrosion/irritation: Category 3 Aspiration hazard: Category 1 Flammable liquids: Category 4 Hazardous to the aquatic environment, long-term (Chronic): Category Chronic 1
Signal Word (s)	DANGER
Hazard Statement (s)	H361 Suspected of damaging fertility or the unborn child H317 May cause an allergic skin reaction H302 Harmful if swallowed H332 Harmful if inhaled H318 Causes serious eye damage H316 Causes mild skin irritation H304 May be fatal if swallowed and enters airways H227 Combustible liquid H410 Very toxic to aquatic life with long lasting effects
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 label before use.
Pictogram (s)	Corrosion, Exclamation mark, Health hazard, Environment



Precautionary statement – Prevention	P280 Wear protective gloves, clothing, eye and face protection. P261 Avoid breathing mists and spray. P272 Contaminated work clothing should not be allowed out of the workplace. P264 Wash hands and exposed skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product.
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Precautionary statement – Response

P271 Use only outdoors or in a well-ventilated area.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P273 Avoid release to the environment.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
 P330 Rinse mouth.
 P331 Do NOT induce vomiting.
 P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other Information

Poisons Schedule S6

3. Composition/information on ingredients

Ingredients	Name	CAS	Proportion
	Liquid Hydrocarbon	64742-94-5	343 g/L
	MCPA (present as the ethyl hexyl ester)	94-74-6	200 g/L
	Bromoxynil present as the n-octanoyl ester	1689-99-2	200 g/L
	Proprietary surfactant mixture		5-10 %

4. First-aid measures

Inhalation	Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.
Ingestion	If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Aust). Make every effort to prevent vomit from entering the lungs by careful placement of the patient.
Skin	Wash affected areas thoroughly with soap and water.
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.
Advice to Doctor	Treat symptomatically. If vomiting occurs, solvent present may cause pulmonary pneumonitis.

5. Fire-fighting measures

Suitable extinguishing media	Water fog, foam, carbon dioxide or dry chemical.
Hazards from Combustion Products	Although material is not flammable, the concentrate is combustible. If involved in a fire, it will emit harmful fumes of hydrogen bromide, hydrogen chloride, hydrogen cyanide and possibly other compounds of bromine, chlorine and nitrogen. Keep upwind.
Special Protective Equipment for fire fighters	Breathable air apparatus may have to be worn in confined spaces.
Hazchem Code	3Z
Other Information	STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

6. Accidental release measures

Spills & Disposal	Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect spilled material and waste in sealable open-top type containers for disposal.
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Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.
Clean-up Methods - Large Spillages	If large liquid spills occur, attempt to recover as much spilt material from sumps and bunded areas, as possible, before absorbing remaining material into vermiculite or other absorbent.
Environmental Precautions	This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

7. Handling and storage

Precautions for Safe Handling	Do NOT contaminate dams, rivers or streams, or any other water bodies with pesticide or used containers.
Conditions for safe storage, including any incompatibilities	Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight.
Other Information	Always read the label and any attached leaflet before use.

8. Exposure controls/personal protection

Occupational exposure limit values	No exposure standard has been established for this product. The manufacturer of the solvent has recommended an occupational exposure limit of 100 mg/m ³ ; 17ppm TWA, as total hydrocarbon.
Appropriate engineering controls	Handle in well ventilated areas, generally natural ventilation is adequate.
Respiratory Protection	Do not inhale spray mist.
Personal Protective Equipment	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.
Hygiene Measures	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.
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.

9. Physical and chemical properties

Form	Liquid
Appearance	Dark brown liquid
Odour	Typical solvent odour
Melting Point	<0 C
Boiling Point	190 - 270°C for solvent
Solubility in Water	Disperses in water.
Specific Gravity	1.07 - 1.09
pH	3.5 - 4.0 (1% solution)
Vapour Pressure	0.19 mPa @ 25°C Bromoxynil octanoate: 0.48 mPa @ 20°C MCPA 2EHE.
Vapour Density (Air=1)	~5 (for solvent present)
Volatile Component	30 - 40%
Partition Coefficient: n-octanol/water	Kow Log P is 5.4 for bromoxynil octanoate; 5.7 for MCPA 2EHE
Flash Point	75°C
Flammability	Combustible liquid C1. (AS1940 - 2017). Combustible Liquid (GHS).
Auto-Ignition Temperature	Not determined

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Flammable Limits - Lower 0.6% for solvent

Flammable Limits - Upper 7.0% for solvent

Explosion Properties No information

10. Stability and reactivity

Chemical Stability Stable under normal conditions.

Possibility of hazardous reactions Violent reactions between Bromicide MA and oxidising agents are possible. Avoid chlorates, nitrates, nitric acid, organic peroxides and potassium chlorate.

Hazardous Polymerization Hazardous polymerisation is not possible.

11. Toxicological Information

Acute Toxicity - Oral LD50 (rat) 238 mg/kg for bromoxynil octanoate
LD50 (rat) 1300 mg/kg for MCPA 2EHE

Acute Toxicity - Dermal LD50 (rat) >2000 mg/kg for bromoxynil octanoate
LD50 (rat) >2000 mg/kg for MCPA 2EHE

Acute Toxicity - Inhalation LC50 (rat) (4hr) 0.72 mg/l for bromoxynil octanoate
LC50 (rat) (4hr) >3.1 mg/l for MCPA 2EHE

Ingestion Possible symptoms of exposure include: headache, nausea, dizziness and weakness.

If aspirated into the lung, e.g. from vomiting, the presence of solvent may result in chemical pneumonitis or other lung damage.

Inhalation High vapour concentrations of the solvent while handling the concentrate are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, and may have other central nervous system effects.

Skin May irritate the skin.

Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.

Skin Sensitisation Bromoxynil octanoate is a skin sensitiser.

Reproductive Toxicity 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.

Chronic Effects Chronic Overexposure: Weight loss and damage to liver and kidneys may be expected if exposure is excessive.

Serious eye damage/irritation Causes serious eye damage.

Skin corrosion/irritation Mild to moderate skin irritant.

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: Aust Govt Dept. of APVMA, 'ADI List', April 2020). ADI for MCPA is 0.01 mg/kg/day, NOEL 1.1 mg/kg/day.

12. Ecological information

Known Harmful Effects on the Environment Harmful to fish and other aquatic organisms.

Other Precautions Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.

Environmental Protection Marine pollutant.

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

Acute Toxicity - Fish The following is data for the active ingredient, bromoxynil octanoate.

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Acute Toxicity - Daphnia	Toxic to fish. LC50 (96hr) for rainbow trout is 0.041 mg/l. LC50 (96hr) for rainbow trout is 1.15 mg/l for MCPA 2EHE LC50 (48hr) for daphnia is 0.046 mg/l for bromoxynil octanoate.
Acute Toxicity - Other Organisms	Bees: Not toxic to bees. LD50 >100 µg/bee.

13. Disposal considerations

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	Do not use this container for any other purpose. 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, 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. Returnable containers: empty contents fully into application equipment. Replace cap, close all valves and return to the point of supply for refill or storage. 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.

14. Transport information

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
Hazchem Code	3Z
Storage and Transport	Considered non dangerous for road and rail transport (in packaging not exceeding 500 kg(L), including IBCs not exceeding 3000 Lt each) by the Australian Code for the Transport of Dangerous Goods by Road and Rail. Ref: ADG7.7; SP No. AU01.
UN Number (Sea Transport)	3082
IMO Class/Packing Group	Class 9/Packing Group III
IMO Marine Pollutant	Marine Pollutant
IMO Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Bromoxynil octanoate)

15. Regulatory information

Regulatory Information	WHS Schedule 11: item 10 - Flammable Liquid category 4 .
Poisons Schedule	S6
Packaging & Labelling	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Other Information	This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA). APVMA product number: 31464.

16. Other Information

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Date of preparation Revised 22/03/2021.

**or last revision of
SDS**

Contact Person/Point Normal Hours: SDS Coordinator Phone: +61 3 9282 1000

After Hours: Shift Supervisor Phone: 1800 033 498

...End Of MSDS...

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