

Safety data sheet

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BASF Safety data sheet
Date / Revised: 01.03.2023
Product: **Liberty® Herbicide**

Version: 1.2

(30771945/SDS_CPA_AU/EN)

Date of print: 17.09.2024

1. Substance/preparation and manufacturer/supplier identification

Product name:
Liberty® Herbicide

Use: crop protection product, herbicide

Manufacturer/supplier:

BASF Australia Limited (ABN 62 008 437 867)
Level 23, 40 City Road, Southbank
Victoria 3006, AUSTRALIA
Telephone: +61 3 8855-6600
Telefax number: +61 3 8855-6511

Emergency information:

BASF Emergency Advice Number: 1800 803 440 (24h) [within Australia]
BASF Emergency Advice Number: + 61 3 8855 6666 [outside Australia]

2. Hazard identification

Classification of the substance and mixture:

Acute toxicity: Cat.4 (oral)

Acute toxicity: Cat.4 (dermal)

Serious eye damage/eye irritation: Cat.2A

Skin sensitization: Cat.1

Reproductive toxicity: Cat.1B (fertility)

Reproductive toxicity: Cat.1B (unborn child)

Specific target organ toxicity — repeated exposure (Nervous system): Cat.2

Hazardous to the aquatic environment - acute: Cat.3

Label elements and precautionary statement:

Pictogram:



Signal Word:
 Danger

Hazard Statement:

H302 + H312	Harmful if swallowed or in contact with skin
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H360	May damage fertility. May damage the unborn child.
H373	May cause damage to organs (Nervous system) through prolonged or repeated exposure.
H402	Harmful to aquatic life.

Precautionary Statement:

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.

Precautionary Statements (Prevention):

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe mist or vapour.
P264	Wash contaminated body parts thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/clothing/eye protection.

Precautionary Statements (Response):

P303 + P352	IF ON SKIN (or hair): Wash with plenty of soap and water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P311	IF exposed or concerned: Call a POISON CENTER or physician.
P330	Rinse mouth
P337 + P311	If eye irritation persists: Call a POISON CENTER or physician.
P361 + P364	Take off immediately all contaminated clothing and wash it before reuse.

Precautionary Statements (Storage):

P405	Store locked up.
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Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.
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Other hazards which do not result in classification:

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition/information on ingredients

Chemical nature

Substance nature: mixture

crop protection product, herbicide, Soluble concentrate (SL)

Hazardous ingredients

Butanoic acid, 2-amino-4-(hydroxymethylphosphinyl)-, monoammonium salt

Content (W/W): 18 %

CAS Number: 77182-82-2

Acute Tox.: Cat. 4 (Inhalation - dust)

Acute Tox.: Cat. 4 (oral)

Acute Tox.: Cat. 4 (dermal)

Repr.: Cat. 1B (fertility)

Repr.: Cat. 2 (unborn child)

STOT SE (Nervous system): Cat. 1

STOT RE (Nervous system): Cat. 2

Aquatic Acute: Cat. 1

Aquatic Chronic: Cat. 1

M-factor acute: 1

M-factor chronic: 1

Polyethyleneglycolmonoalkylethersulphate, sodium salt

Content (W/W): > 10 % - < 25 %

CAS Number: 68891-38-3

Eye Dam./Irrit.: Cat. 1

Skin Corr./Irrit.: Cat. 2

Aquatic Acute: Cat. 2

Aquatic Chronic: Cat. 3

1-methoxypropan-2-ol

Content (W/W): > 1 % - < 10 %

CAS Number: 107-98-2

Flam. Liq.: Cat. 3

Acute Tox.: Cat. 5 (oral)

STOT SE: Cat. 3 (drowsiness and dizziness)

4. First-Aid Measures

General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Immediately wash thoroughly with soap and water, seek medical attention.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Immediately rinse mouth and then drink 200 - 300 ml water, do not induce vomiting, seek medical attention.

Note to physician:

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., vomiting, diarrhea, abdominal cramps, tremors, hypotony, unconsciousness, coma, convulsions, respiratory disorders, nausea, tachycardia, Symptoms may be delayed for several hours., (Further) symptoms and / or effects are not known so far

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

Unsuitable extinguishing media for safety reasons:

water jet

Specific hazards:

carbon monoxide, carbon dioxide, nitrogen oxides

The substances/groups of substances mentioned can be released in case of fire.

Special protective equipment:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental Release Measures

Personal precautions:

Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

Environmental precautions:

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

7. Handling and Storage

Handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

Storage

Segregate from foods and animal feeds.

Further information on storage conditions: Keep only in the original container. Keep container tightly closed and dry; store in a cool place. Keep away from heat. Protect from direct sunlight. Protect from frost.

Storage stability:

Storage duration: 60 Months

8. Exposure controls and personal protection

Components with occupational exposure limits

1-methoxypropan-2-ol, 107-98-2;

TWA value 50 ppm (ACGIHTLV)

STEL value 100 ppm (ACGIHTLV)

STEL value 553 mg/m³ ; 150 ppm (AU NOEL)

TWA value 369 mg/m³ ; 100 ppm (AU NOEL)

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic and alkaline compounds (e.g. EN 14387 Type ABEK).

Hand protection:

Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Form: liquid
Colour: blue to green
Odour: pungent
Odour threshold: Not determined due to potential health hazard by inhalation.

pH value: approx. 6 - 8
(20 °C)
(as such)

Melting point: approx. 0 °C
Information applies to the solvent.

Boiling point: approx. 100 °C
Information applies to the solvent.

Flash point: 60 °C
UN L.2 Sustained combustibility, The product does not burn self-sustainingly.

Evaporation rate: not applicable

Flammability (solid/gas): not applicable
Lower explosion limit:

As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.

Upper explosion limit:

As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.

Ignition temperature:	Based on the water content the product does not ignite.
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Explosion hazard:	Based on the chemical structure there is no indication of explosive properties.
Fire promoting properties:	Based on its structural properties the product is not classified as oxidizing.
Vapour pressure:	approx. 23 hPa (20 °C) Information applies to the solvent.
Density:	approx. 1.11 g/cm ³ (20 °C)
Relative vapour density (air):	not applicable
Solubility in water:	soluble
Partitioning coefficient n-octanol/water (log Pow):	not applicable
Viscosity, dynamic:	No data available.

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and Reactivity

Conditions to avoid:

Avoid excessive temperatures. Avoid direct sunlight. See SDS section 7 - Handling and storage.

Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
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Substances to avoid:
bases

Hazardous reactions:

No hazardous reactions if stored and handled as prescribed/indicated.

Hazardous decomposition products:
ammonia

Chemical stability:

The product is stable if stored and handled as prescribed/indicated.

Reactivity:

No hazardous reactions if stored and handled as prescribed/indicated.

11. Toxicological Information

Routes of exposure

Acute oral toxicity

Experimental/calculated data:
LD50rat (oral): 1,910 mg/kg

Acute inhalation toxicity

LC50 rat (by inhalation): 3.22 mg/l 4 h
An aerosol was tested.

Acute dermal toxicity

LD50 rat (dermal): 1,380 mg/kg

Assessment of acute toxicity

Of moderate toxicity after single ingestion. Of moderate toxicity after short-term skin contact. Inhalation is not likely in the available physical form. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Symptoms

Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.
vomiting diarrhea abdominal cramps tremors hypotony unconsciousness coma convulsions respiratory disorders nausea tachycardia Symptoms may be delayed for several hours. (Further) symptoms and / or effects are not known so far

Irritation

Assessment of irritating effects:

Eye contact causes irritation. Not irritating to the skin. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant

Serious eye damage/irritation rabbit: Irritant.

Respiratory/Skin sensitization

Assessment of sensitization:

Sensitization after skin contact possible.

Experimental/calculated data:

Mouse Local Lymph Node Assay (LLNA) mouse: (OECD Guideline 429)

Germ cell mutagenicity

Assessment of mutagenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity

Assessment of carcinogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. In long-term studies in mice in which the substance was given by feed, a carcinogenic effect was not observed.

Reproductive toxicity

Assessment of reproduction toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: glufosinate ammonium (ISO); ammonium 2-amino-4-(hydroxymethylphosphinyl)butyrate

Assessment of reproduction toxicity:

Causes impairment of fertility in laboratory animals.

Developmental toxicity

Assessment of teratogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: glufosinate ammonium (ISO); ammonium 2-amino-4-(hydroxymethylphosphinyl)butyrate

Assessment of teratogenicity:

The substance did not cause malformations in animal studies; however, toxicity to development was observed at doses that were toxic to the parental animals.

Specific target organ toxicity (single exposure)

Based on available data, the classification criteria are not met.

Remarks: The product has not been tested. The statement has been derived from the properties of the individual components.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: glufosinate ammonium (ISO); ammonium 2-amino-4-(hydroxymethylphosphinyl)butyrate

Assessment of repeated dose toxicity:

Prolonged or repeated exposure may cause neurological disturbances.

Aspiration hazard

No aspiration hazard expected.

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:

Harmful to aquatic life.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Toxicity to fish:

LC50 (96 h) 34 mg/l, *Oncorhynchus mykiss*

Aquatic invertebrates:

EC50 (48 h) 26.8 mg/l, *Daphnia magna*

Aquatic plants:

EC50 (72 h) 36 mg/l, *Desmodium subspicatum*

Mobility

Assessment transport between environmental compartments:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: glufosinate ammonium (ISO); ammonium 2-amino-4-(hydroxymethylphosphinyl)butyrate

Assessment transport between environmental compartments:

Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

Persistence and degradability

Assessment biodegradation and elimination (H₂O):

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: glufosinate ammonium (ISO); ammonium 2-amino-4-(hydroxymethylphosphinyl)butyrate

Assessment biodegradation and elimination (H₂O):

Not readily biodegradable (by OECD criteria).

Bioaccumulation potential

Assessment bioaccumulation potential:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: glufosinate ammonium (ISO); ammonium 2-amino-4-(hydroxymethylphosphinyl)butyrate
 Bioaccumulation potential:
 Bioconcentration factor: < 1, Lepomis macrochirus
 Does not accumulate in organisms.

Additional information

Other ecotoxicological advice:
 Do not discharge product into the environment without control.

13. Disposal Considerations

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:
 Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

14. Transport Information

Domestic transport:

	Not classified as a dangerous good under transport regulations
UN number or ID number	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Sea transport

IMDG

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Air transport

IATA/ICAO

	Not classified as a dangerous good under transport regulations
UN number or ID number	Not applicable
Proper shipping name:	Not applicable

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Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

15. Regulatory Information

Other regulations

To avoid risks to man and the environment, comply with the instructions for use.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): Schedule 5

APVMA Approval No: 53595

16. Other Information

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.