

Safety data sheet

BASF Safety Data Sheet
Date / Revised: 26.11.2018
Product: **BUSTER®**

(Ref ID no. 30716991/SDS_CPA_00/EN)

1. Identification of the substance/mixture and of the company/undertaking

Product identifier

BUSTER®

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: crop protection product, herbicide.

Details of the supplier of the safety data sheet

Company:

BASF New Zealand Limited
Level 4, 4 Leonard Isitt Drive, Auckland Airport, Auckland 2022
P.O. Box 407, Auckland 1140
Phone: + 64 9 255 4300
Fax: + 64 9 255 4307
E-mail address: reception@basf-nz.co.nz

Emergency telephone number

National Poisons Centre: 0800 764 766
BASF Emergency Advice Number: 0800 944 955 (24 hour advice in an emergency only)

2. Hazards Identification

Hazard Classification:

3.1D; 6.1D; 6.3B; 6.4A; 6.8B; 6.9A; 9.1C; 9.1D; 9.2B; 9.3C



Signal Word: DANGER.

Hazard Statement:

H227	Combustible liquid
H302	Harmful if swallowed
H312	Harmful in contact with skin
H332	Harmful if inhaled
H316	Causes mild skin irritation
H320	Causes eye irritation
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure

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H412 Harmful to aquatic life with long lasting effects
H422 Toxic to the soil environment
H433 Harmful to terrestrial vertebrates

Precautionary Statement (Prevention):

P102 Keep out of reach of children.
P103 Read label before use.
P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P210 Keep away from flames and hot surfaces. No smoking.
P260 Do not breath mist, vapours and spray
P264 Wash hands thoroughly after handling
P270 Do not eat, drink or smoke when using this product
P271 Use only outdoors or in a well-ventilated area
P280 Wear protective gloves, protective clothing, eye/face protection

Precautionary Statements (Response):

P101 If medical advice is needed, have product container or label at hand.
P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P301+P312 P330 IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell. Rinse mouth.
P302+ P352 P312 IF ON SKIN: Wash with plenty of water/ soap. Call a POISON CENTER or doctor/physician if you feel unwell.
P322 Specific measures (see supplemental first aid instructions on this label).
P304 + P340 P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
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.
P391 Collect spillage.

Precautionary Statements (Storage):

P405 Store locked up
P403 + P235 Store in a well-ventilated place. Keep cool.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection point. Information regarding disposal considerations can be found in section 13.

According to UN GHS criteria

Hazard determining component(s) for labelling: glufosinate ammonium (ISO)

Other hazards

No other hazards known.

See section 12 - Results of PBT and vPvB assessment.

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

3. Composition/Information on Ingredients

Mixtures

Chemical nature

Crop protection product, herbicide, soluble concentrate (SL).

Glufosinate-ammonium 200g/L

Hazardous ingredients (GHS)

According to UN GHS criteria

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

Content (W/W): 18 % Acute Tox. 4 (Inhalation - vapour)

CAS Number: 77182-82-2 Acute Tox. 4 (oral)

EC-Number: 278-636-5 Acute Tox. 4 (dermal)

INDEX-Number: 015-155- Repr. 1B (fertility)

00-X Repr. 1B (unborn child)

STOT RE 2

H312, H332, H302, H373, H360

Polyethyleneglycolmonoalkylethersulphate, sodium salt

Content (W/W): > 10 % - < 25 % Skin Corr./Irrit. 2

CAS Number: 68891-38-3 Eye Dam./Irrit. 1

EC-Number: 500-234-8 Aquatic Chronic 3

H318, H315, H412

1-methoxy-2-propanol

Content (W/W): > 1 % - < 10 % Flam. Liq. 3

CAS Number: 107-98-2 Acute Tox. 5 (oral)

EC-Number: 203-539-1 STOT SE 3 (drowsiness and dizziness)

INDEX-Number: 603-064-00-3 H226, H303, H336

For the classifications not written out in full in this section the full text can be found in section 16.

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:

DO NOT induce vomiting. Call a poison control center or physician for treatment advice. Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., vomiting, diarrhea, abdominal cramps, tremors, hypotony, unconsciousness, coma, convulsions, respiratory disorders, nausea, rapid heart rate, Symptoms may

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be delayed for several hours.

Indication of any immediate medical attention and special treatment needed

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

Contact the National Poisons and Hazardous Chemicals Information centre.
Phone 0800 POISON (0800 764 766).

5. Fire-Fighting Measures

Suitable extinguishing media:

Use water spray, dry powder, foam, carbon dioxide

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 and material for containment and cleaning 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

Precautions for safe 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.

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Keep only in the original container. Keep container tightly

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closed and dry; store in a cool place. Keep away from heat. Protect from direct sunlight. Protect from frost.

Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

AGGREGATE STORAGE VOLUME THRESHOLDS: When stored with substances of the same hazard the aggregate quantity must be considered. For full details refer to the current standard NZS8409 Management of Agrichemicals or the HSNO Regulations.						
Location Certificate*:	Hazardous Atmosphere Zone*:	Fire Extinguishers:	Signage [Hazard Class & Emergency Action]:	Emergency Information:	Emergency Response Plan:	Secondary Containment:
NA	NA	2 for \geq 500 L	1 000 litres	0.1 litres	1 000 litres	1 000 litres
* Note: Farms \geq 4 ha are exempt but with controls						
DO NOT STORE OR LOAD WITH: NA			SEGREGATE FROM: Under HSNO segregate from Class 1, 2, 3.2, 4 and 5 Foodstuffs and Food Containers			
Segregation: Check the Land Transport Rule Dangerous Goods, Rule 45001 for additional information. Sea transport may require additional segregation. Refer to NZS5433 Sea Segregation for details.						

Note: Storage, application and record keeping must be as described in the current version of the New Zealand Standard for the Management of Agrichemicals NZS8409

8. Exposure Controls/Personal Protection

Control parameters

Components with workplace control parameters

CAS 107-98-2: 1-methoxy-2-propanol

Exposure controls

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 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): 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

Information on basic 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:	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.
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 Kow):	not applicable
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Explosion hazard:	Based on the chemical structure there is no indicating of explosive properties.
Fire promoting properties:	Based on its structural properties the product is not classified as oxidizing.

10. Stability and Reactivity

Reactivity

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

Chemical stability

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

Possibility of hazardous reactions

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

Conditions to avoid

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

Incompatible materials

Substances to avoid:

bases

Hazardous decomposition products

ammonia, anhydrous

No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

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.

Experimental/calculated data:

LD50 rat (oral): 1.910 mg/kg

LC50 rat (by inhalation): 3,22 mg/l 4 h

The test result applies only to the substance transferred into respirable aerosol (particles < 20 µm).

LD50 rat (dermal): 1.380 mg/kg

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: sensitizing (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 caused malformations/developmental toxicity in laboratory animals. 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)

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

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*

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).

Bioaccumulative 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: 0,05 - 0,3 (42 d), *Lepomis macrochirus**

Does not accumulate in organisms.

Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: 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:

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

Results of PBT and vPvB assessment

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

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Other adverse effects

The product does not contain substances that are listed in the Montreal Protocol on substances that deplete the ozone layer.

Additional information

Other ecotoxicological advice:
Do not discharge product into the environment without control.
Do not apply onto or into water.

13. Disposal Considerations

Container:

Triple rinse empty container and add rinsate to the spray tank. Recycle through Agrecovery (0800 247 326, www.agrecovery.co.nz). Do not use container for any other purpose.

Product:

Dispose of this product only by using according to the label or at an approved landfill or at an approved facility. Do NOT burn product. Do NOT contaminate water with product or used container. Waste product/packaging may be sent to a suitable incineration plant, observing local regulations.

14. Transport Information

Commercial transport:

Not classified as Dangerous Goods for Land/rail (ADR/RID), sea (IMDG/GGVSee) and air transport (ICAO/IATA):

UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Marine pollutant:	Not applicable
HAZCHEM:	Not applicable

15. Regulatory Information

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

NZ Regulations

Approved pursuant to the HSNO Act 1996, Code HSR000152.
See www.epa.govt.nz for approval conditions.

Registered pursuant to the ACVM Act 1997, Nos. P003064.
See www.foodsafety.govt.nz/acvm for registration conditions.

16. Other Information

Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:

Acute Tox.	Acute toxicity
Eye Dam./Irrit.	Serious eye damage/eye irritation
Skin Sens.	Skin sensitization

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Repr.	Reproductive toxicity
STOT RE	Specific target organ toxicity — repeated exposure
Skin Corr./Irrit.	Skin corrosion/irritation
Aquatic Chronic	Hazardous to the aquatic environment - chronic
Flam. Liq.	Flammable liquids
STOT SE	Specific target organ toxicity — single exposure
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H302	Harmful if swallowed.
H373	May cause damage to organs () through prolonged or repeated exposure.
H360	May damage fertility. May damage the unborn child.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H412	Harmful to aquatic life with long lasting effects.
H226	Flammable liquid and vapour.
H303	May be harmful if swallowed.
H336	May cause drowsiness or dizziness.

For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

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.