



SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name	Basta® Non-Selective Herbicide
Other names	none
Product code (UVP)	79452624
Chemical Group	glycine derivative phosphinic acid
Recommended use	Herbicide
Chemical Formulation	Soluble concentrate (SL)
Company	Bayer Cropscience Pty Ltd -ABN 87 000 226 022 391-393 Tooronga Road, East Hawthorn Victoria 3123, Australia
Telephone	(03) 9248 6888
Technical Information Service	1800 804 479
Facsimile	(03) 9248 6800
Website	www.bayercropscience.com.au
Emergency telephone no.	1800 033 111 Orica SH&E Shared Services

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

HAZARDOUS SUBSTANCE

NON-DANGEROUS GOODS

Hazardous classification	Hazardous (National Occupational Health and Safety Commission - NOHSC)
R-phrases(s)	R36 - Irritating to eyes. R21 - Harmful in contact with skin. R48/20/22 - Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. R60 - May impair fertility. R63 - Possible risk of harm to the unborn child.
S-phrases(s)	See sections 4, 5, 6, 7, 8, 10, 12, 13.
ADG Classification	Not "dangerous goods" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. - See Section 14.
SUSMP classification (Poison Schedule)	Schedule 5 (Standard for the Uniform Scheduling of Medicines and Poisons)

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature
 Glufosinate-ammonium 200g/l

Chemical Name	CAS-No.	Concentration [%]
Glufosinate ammonium	77182-82-2	18.02
1-Methoxy-2-propanol	107-98-2	9.91
Other ingredients (non-hazardous) to 100%		



SECTION 4. FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (telephone 13 11 26), and follow the advice given. Show this Safety Data Sheet to the doctor.

Inhalation

Move to fresh air. Keep patient warm and at rest. If symptoms persist, call a physician.

Skin contact

Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

Wash off immediately with plenty of water for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.

Ingestion

Do NOT induce vomiting. Keep at rest. Rinse mouth. Call a physician or poison control center immediately.

Notes to physician

Symptoms

Vomiting, Diarrhoea, Abdominal pain, Tremors, Hypotension, muscular weakness, Unconsciousness, Coma, Convulsions, Respiratory failure, Nausea, Tachycardia

Symptoms

Symptoms may be delayed.

Treatment

Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable.

Forced alkaline diuresis and hemodialysis may be considered.

There is no specific antidote.

In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens.

If not effective, phenobarbital may be used.

Contraindication: atropine.

Oxygen or artificial respiration if needed.

Keep respiratory tract clear.

ECG - monitoring (Electrocardiogram).

EEG - monitoring (Electroencephalogram).

Monitor: respiratory, cardiac and central nervous system.

Keep under medical supervision for at least 48 hours.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray

Foam

Carbon dioxide (CO₂)

Dry powder

Hazards from combustion products



In the event of fire the following may be released:

Carbon monoxide (CO)
Carbon dioxide (CO₂)
Nitrogen oxides (NO_x)
Oxides of phosphorus
Sulphur oxides

Precautions for fire-fighting

In the event of fire, wear self-contained breathing apparatus.
Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat.
Whenever possible, contain fire-fighting water by diking area with sand or earth.
Do not allow run-off from fire fighting to enter drains or water courses.

Hazchem Code not applicable

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment.

Environmental precautions

Do not allow to get into surface water, drains and ground water.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Clean contaminated floors and objects thoroughly, observing environmental regulations.
Keep in suitable, closed containers for disposal.

Reference to other sections

Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7. HANDLING AND STORAGE

Handling

Hygiene measures

When using, do not eat, drink or smoke.
Handle in accordance with good industrial hygiene and safety practice.
Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
Remove soiled clothing immediately and clean thoroughly before using again.

Storage

Requirements for storage areas and containers

Keep out of the reach of children.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep away from direct sunlight.
Protect from freezing.

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters



Components	CAS-No.	Control parameters	Update	Basis
1-Methoxy-2-propanol	107-98-2	553 mg/m ³ / 150 ppm (STEL)	08 2005	AU OEL
1-Methoxy-2-propanol	107-98-2	369 mg/m ³ / 100 ppm (TWA)	08 2005	AU OEL

For further details on the Occupational Exposure Standards, see Section 16.

Biological limit values
 none

Personal protective equipment - End user

General advice Eye wash facility and safety shower should be available.

Respiratory protection Use respiratory protection for organic vapours.
 AS/NZS 1715/1716 approved respirator

Hand protection Elbow-length PVC or nitrile gloves

Eye protection Face-shield or goggles

Skin and body protection Cotton overall buttoned to the neck and wrist
 Washable hat

Engineering Controls

Advice on safe handling
 Provide for appropriate exhaust ventilation and dust collection at machinery.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form Liquid

Colour blue to blue green

Odour weakly pungent

Safety data

pH 5.9 - 7.9 at 100 % (23 °C)

Flash point 60 °C

Ignition temperature 440 °C

Upper explosion limit no data available

Lower explosion limit no data available

Vapour pressure no data available

Relative vapour density no data available

Density ca. 1.11 g/cm³ at 20 °C



Water solubility	soluble
Partition coefficient: n-octanol/water	no data available

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Conditions to avoid	Heat, flames and sparks.
Materials to avoid	Strong oxidizing agents Acids Bases Alkali metals
Hazardous Decomposition Products	Thermal decomposition can lead to release of: Ammonia Oxides of carbon Nitrogen oxides (NOx) Oxides of phosphorus Sulphur oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Inhalation	Harmful if inhaled.
Skin	Harmful if absorbed through skin. Irritating to skin.
Eye	Causes eye irritation.
Ingestion	Harmful if swallowed.
Acute oral toxicity	LD50 (rat) 1,910 mg/kg
Acute inhalation toxicity	LC50 (rat) 3.22 mg/l Exposure time: 4 h
Acute dermal toxicity	LD50 (rat) 1,380 mg/kg
Skin irritation	Slight irritation (rabbit)
Eye irritation	Moderate eye irritation. (rabbit)
Sensitisation	Non-sensitizing. (guinea pig)
Chronic toxicity	Glufosinate-ammonium caused neurobehavioral effects and/or neuropathological changes in animal studies. Glufosinate-ammonium was well tolerated in rats and mice but less well tolerated in the dog in subchronic studies.

Assessment Mutagenicity

Glufosinate-ammonium was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.



Assessment Carcinogenicity

Glufosinate-ammonium was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment Toxicity to Reproduction

Implantation loss occurred in a rat multigeneration study with Glufosinate-ammonium. There were no effects on male fertility.

Assessment developmental toxicity

Glufosinate-ammonium caused developmental toxicity only at dose levels toxic to the dams. Glufosinate-ammonium caused an increased incidence of post implantation losses.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) 34 mg/l Exposure time: 96 h Test conducted with a similar formulation.
Toxicity to aquatic invertebrates	EC50 (Water flea (Daphnia magna)) 26.8 Exposure time: 48 h Test conducted with a similar formulation.
Toxicity to aquatic plants	(Desmodesmus subspicatus) 36 mg/l Exposure time: 72 h Test conducted with a similar formulation.
Toxicity to other organisms	LC50 (Coturnix japonica (Japanese quail)) > 5,000 mg/kg Exposure time: 8 d The value mentioned relates to the active ingredient glufosinate-ammonium.
Biodegradability	Readily biodegradable. The value mentioned relates to the active ingredient glufosinate-ammonium.
Stability in soil	no data available
Bioaccumulation	The ecological data given are those of the active ingredient. Does not bioaccumulate.
Additional Environmental Information	no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Metal drums and plastic containers:

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm 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.

Refillable containers:

If tamper evident seals are broken prior to initial use then the integrity of the contents cannot be assured. Empty container by pumping through dry-break connection system. Do not attempt to breach the valve system or the filling point, or contaminate the container with water or other products. Ensure that the coupler, pump, meter and hoses are disconnected, triple rinsed and drained after each use. When empty, or contents no longer required, return the container to the point of purchase. This container remains the property of Bayer CropScience Pty Ltd.

SECTION 14. TRANSPORT INFORMATION

According to national and international transport regulations not classified as dangerous goods.

SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994

Australian Pesticides and Veterinary Medicines Authority approval number: 39118

See also Section 2.

SECTION 16. OTHER INFORMATION

Trademark information Basta® is a registered trademark of the Bayer Group.

This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

Further details on the Occupational Exposure Standards mentioned in Section 8:

CEILING: Ceiling Limit Value

OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

PEAK: Exposure Standard - Peak means a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

STEL: Exposure standard - short term exposure limit (STEL): A 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.

SKIN_DES: Skin notation: Absorption through the skin may be a significant source of exposure.

TWA: Exposure standard - time-weighted average (TWA): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

Bayer CropScience
Safety Data Sheet
Basta® Non-Selective Herbicide



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Changes since the last version are highlighted in the margin. This version replaces all previous versions.

END OF SDS