

Genfarm Terbuthylazine 500 Herbicide

Version number: 1.0

Date of compilation: 20.06.2025

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name **Genfarm Terbuthylazine 500 Herbicide**

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

Relevant identified uses **Herbicide**

1.3 Details of the supplier of the safety data sheet

Nutrien Ag Solutions New Zealand Limited
37 Westward Way
Methven, 7730, New Zealand
Email: adminnz@nutrien.com

Telephone: 021 0831 6608
Emergency Phone Number: National Poisons Centre - 0800 764 766 (0800 POISON)

Imported/Manufactured by:
Nutrien Ag Solutions Limited
Level 5, Building A; 26 Talavera Road
Macquarie Park NSW 2113
Australia

Telephone: +61 (02) 9889 5400

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Hazardous Substances (Hazard Classification) Notice 2020.
Classified as Dangerous Goods according to the New Zealand Standard NZS 5433:2020 - Transport of dangerous goods on land.

Classification acc. to GHS

Hazard class	Category	Classification code
Specific target organ toxicity - repeated exposure	2	H373
Hazardous to the aquatic environment - acute hazard	1	H400
Hazardous to the aquatic environment - chronic hazard	1	H410

Supplemental hazard information

Hazardous to soil organisms. Hazardous to terrestrial vertebrates.

For full text of abbreviations: see SECTION 16.

2.2 Label elements

Signal word **Warning**

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Pictograms



Hazard statements

H373 May cause damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.
Hazardous to soil organisms. Hazardous to terrestrial vertebrates.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.
P314 Get medical advice/attention if you feel unwell.
P391 Collect spillage.
P501 Dispose of contents/container to industrial combustion plant.

SECTION 3: Composition/information on ingredients

Mixture of substances as listed below.

Description of the mixture

Mixture of substances listed below with ingredients not classified as hazardous.

Name of substance	CAS No	Wt%	Classification acc. to GHS
Terbutylazine	5915-41-3	40 – 50	Acute Tox. 4 / H302 STOT RE 2 / H373 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410
Ethylene glycol	107-21-1	1 – 5	Acute Tox. 4 / H302 STOT SE 3 / H335

SECTION 4: First aid measures

4.1 Description of first aid measures

Following inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician.

Following skin contact

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. If skin irritation occurs: Get medical advice/attention.

Following eye contact

Remove contact lenses, if present and easy to do. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. If eye irritation persists: Get medical advice/attention.

Following ingestion

Keep at rest. Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

May cause eye irritation, redness and tearing. May cause gastrointestinal irritation, nausea, diarrhoea and vomiting. Skin contact may cause mild irritation. Inhalation of mist may cause respiratory irritation.

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO₂)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products include oxides of nitrogen, amines, oxides of carbon and chlorine compounds.
HAZCHEM (Emergency Action) Code: 3Z

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ventilate affected area. Prevent skin contact. Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Collection and use of expertise.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Bunding, Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use only in well-ventilated areas. Handle and open container with care.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry and well-ventilated area. Keep container tightly closed. Protect from sunlight. Keep away from strong acids, and strong oxidising agents.

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- Packaging compatibilities
Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Name of agent	CAS No	Identifi- er	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Nota- tion
Ethylene glycol (ethane- diol)	107-21-1	WES		10			H
Ethylene glycol (ethane- diol)	107-21-1	WES	20	52	40	104	H, vap

Notation

H	absorbed through the skin
STEL	short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA	time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)
vap	as vapours

8.2 Exposure controls

Appropriate engineering controls

Open windows, door, to allow sufficient ventilation. If this is not possible employ a fan to increase air exchange.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection. Use safety goggle with side protection. Use protective eyewear to guard against splash of liquids.

Skin protection

- Hand protection

Wear protective gloves. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Wash hands and face thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Type: A-P2 (combined filters against particles and organic gases and vapours) according to AS/NZS1716 standards.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	white
Odour	uncharacteristic
Boiling point	>100 °C
Flammability	non-combustible
Flash point	does not flash up to boiling point

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Decomposition temperature	no data available
pH (value)	6 – 8
Density	1.1 g/cm ³
Water solubility	miscible in any proportion

SECTION 10: Stability and reactivity

10.1 Chemical stability

Stable under normal conditions of use.

10.2 Possibility of hazardous reactions

No known hazardous reactions.

10.3 Conditions to avoid

UV-radiation/sunlight. Keep away from incompatible materials.

10.4 Incompatible materials

Strong acids, strong bases, and strong oxidising agents.

10.5 Hazardous decomposition products

Oxides of nitrogen, amines, oxides of carbon and chlorine compounds.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification acc. to GHS

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity of components						
Name of substance	CAS No	Exposure route	Endpoint	Value	Species	Notes
Terbuthylazine	5915-41-3	oral	LD50	>1,000 mg/kg	rat	
Terbuthylazine	5915-41-3	dermal	LD50	2,000 mg/kg	rat	
Terbuthylazine	5915-41-3	inhalation: dust/mist	LC50	>5.3 mg/l/4h	rat	nose only
Ethylene glycol	107-21-1	oral	LD50	7,712 mg/kg	rat	
Ethylene glycol	107-21-1	dermal	LD50	>3,500 mg/kg	mouse	

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

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Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Terbutylazine	5915-41-3	LC50	2.2 mg/l	rainbow trout (<i>Oncorhynchus mykiss</i>)	96 h
Terbutylazine	5915-41-3	EC50	21.2 mg/l	water flea (<i>Daphnia</i>)	48 h
Terbutylazine	5915-41-3	EC50	0.012 mg/l	green algae (<i>Pseudokirchneriella subcapitata</i>)	48 h
Ethylene glycol	107-21-1	LC50	53,000 mg/l	fish	96 h
Ethylene glycol	107-21-1	EC50	>100 mg/l	aquatic invertebrates	48 h

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Terbutylazine	5915-41-3	NOEC	0.09 mg/l	rainbow trout (<i>Oncorhynchus mykiss</i>)	21 d
Terbutylazine	5915-41-3	NOEC	0.019 mg/l	water flea (<i>Daphnia</i>)	21 d
Ethylene glycol	107-21-1	LC50	>1,500 mg/l	fish	28 d
Ethylene glycol	107-21-1	NOEC	>40 mg/l	fish	28 d

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions.

Waste treatment of containers/packagings

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

UN number

UN RTDG, IMDG, IATA UN 3082

UN proper shipping name

UN RTDG, IMDG, IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains terbuthylazine)

Transport hazard class(es)

UN RTDG, IMDG, IATA 9

Packing group

UN RTDG, IMDG, IATA III

Danger label(s)



Special provisions (SP) 274, 331, 335, 363

Excepted quantities (EQ) E1

Limited quantities (LQ) 5 L

HAZCHEM (Emergency Action) Code 3Z

Marine pollutant YES (hazardous to the aquatic environment) (terbuthylazine)

ERG (ANZ 2024) Guide No. 171

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Agricultural Compounds and Veterinary Medicines Act 1997

Registered pursuant to the ACVM Act 1997, No. P10379.

Hazardous Substances and New Organisms Act 1996

Approved pursuant to the HSNO Act 1996. Approval Code HSR100826.

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SECTION 16: Other information

Abbreviations and acronyms

Acute Tox.	acute toxicity
Aquatic Acute	hazardous to the aquatic environment - acute hazard
Aquatic Chronic	hazardous to the aquatic environment - chronic hazard
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
ppm	parts per million
STEL	short-term exposure limit
STOT RE	specific target organ toxicity - repeated exposure
STOT SE	specific target organ toxicity - single exposure
TWA	time-weighted average
vPvB	very Persistent and very Bioaccumulative
WES	Safe Work Australia: Workplace exposure standards for airborne contaminants

Key literature references and sources for data

Hazardous Substances (Safety Data Sheets) Notice 2017.
New Zealand Standard NZS 5433:2020 - Transport of dangerous goods on land.

Disclaimer

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