



SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Tyllanex**
Product Use: Herbicide
Restriction of Use: Refer to Section 15

New Zealand Supplier: ADAMA New Zealand Ltd
Address: 1/93 Bolt Road
Tahunanui, Nelson
Telephone: +64 3 543 8275
Fax Number: +64 3 543 8274

Emergency Telephone: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 15 January 2020

Section 2. Hazards Identification

This substance is hazardous according to the *Hazardous Substances (Classification) Notice 2017*

EPA Approval No: HSR100826

Pictograms



Chronic



Ecotoxic

Signal Word: **Warning**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1E (oral)	H303	May be harmful if swallowed.	Acute Tox. 5
6.9B	H373	May cause damage to organs through prolonged or repeated exposure.	STOT RE 2
9.1A	H400	Very toxic to aquatic life with long last effects.	Aquatic Acute 1
9.2A	H421	Very toxic to the soil environment.	-
9.3C	H433	Harmful to terrestrial vertebrates.	-

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe fumes, vapours and spray.
P273	Avoid release to the environment.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P391	Collect spillage.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Wherever possible completely use material by using according to label instructions. Dispose of unwanted product and wastes from spillages as hazardous substances in accordance with local and national regulations using a licensed waste disposal company. Triple rinse containers and add rinsate to spray tank before puncturing and offering for recycling or landfill. Do not allow product to enter waterways. Do not burn product or container.

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Terbutylazine	<60	5715-41-3
Proprietary surfactants	<5	Proprietary
Ethylene Glycol	<10	107-21-1
Non hazardous	To bal	-

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. If eye irritation persists: Get medical advice.
If on Skin	Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention.
If Swallowed	Wash out mouth thoroughly with water. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Seek medical attention if needed.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion: May be harmful if swallowed.

Chronic: May cause damage to organs (oral) through prolonged or repeated exposure.

Note to Doctor: No specific antidote. Treat symptomatically.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable.
Hazards from combustion products	Vapours may be toxic.
Suitable Extinguishing	Dry chemical, water spray (fog), foam or carbon dioxide.

media	
Precautions for firefighters and special protective clothing	Firefighters must wear self-contained breathing apparatus, protective gloves and clothing. Do not allow contaminated runoff to enter drains.
HAZCHEM CODE	3Z

Section 6. Accidental Release Measures

Wear full protective clothing as detailed in Section 8. Evacuate area from unnecessary personnel. Spills may be slippery and should be cleaned up immediately.

Environmental precautions

Warning this substance is very toxic to aquatic organisms. Prevent further leakage or spillage if safe to do so. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Dike and pump as much as possible to a salvage container. Absorb the remaining liquid and any small spills with clay granules, sand or other absorbent material and sweep to a waste container. Cover the spill area with water and absorb. Minimise runoff into waterways or drains. Dispose as per Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Do not breathe fumes, vapours and spray.
- Avoid release to the environment.
- Wear personal protective equipment appropriate to the situation when handling product.
- Wash protective clothing daily after work.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep away from children.
- Store in original container, tightly closed away from food, food related materials, animal feedstuffs, seed or fertilizer.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA ppm mg/m3	STEL ppm mg/m3
Ethylene glycol (vapour and mist) [107-21-1]	Ceiling 50ppm (127mg/m3)	

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2019 11TH EDITION.

Engineering Controls

General (mechanical) room ventilation is considered satisfactory.

Personal Protection Equipment

Eyes	Not normally required. But should be used as a matter of good practice when handling or mixing any chemical substances where splashing may occur.
Hands and Skin	Wear PVC coated gloves.
Respiratory	Transfer or mix with adequate ventilation.
General	Do not eat drink or smoke while working with this product. Remove clothing that becomes soaked or contaminated and wash before reuse. Wash hands before breaks and after work. The use of a skin barrier cream is useful to give additional skin protection.

Section 9 Physical and Chemical Properties

Appearance	Creamy liquid suspension concentrate
Odour	Not applicable
Odour Threshold	Not applicable
pH	7.0 – 8.0
Boiling Point	Not available
Melting Point	Not applicable
Flash Point	Not applicable
Flammability	Not applicable
Upper and Lower Exposure Limits	Not applicable
Vapour Pressure	0.15 mPa (25°C) active
Density	1.11
Solubilities	8 ppm in water but disperses easily.
Partition Coefficient:	Not applicable
Auto-ignition Temperature	Not applicable
Kinematic viscosity mm²/s 40 °C	Not applicable
Particle Characteristics	Not applicable

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Conditions to Avoid	None known.
Incompatible Materials	None known.
Hazardous Decomposition Products	None known.

Section 11 Toxicological Information

Acute Effects:

Swallowed	May be harmful if swallowed.
Dermal	Not applicable.
Inhalation	Not applicable
Eye	Not applicable.
Skin	Causes mild skin irritation. May also cause an allergic reaction.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell	Not applicable.

Mutagenicity	
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	May cause organ damage from repeated oral exposure at high doses. Target organs affected are the cardiovascular system and the nervous system.

** There is some Toxic data on Lonza SDS but not sure re formulation.

Section 12. Ecotoxicological Information

HSNO Classes: 9.1A = Very toxic to aquatic life.
9.2A= Very toxic to the soil environment.
9.3C = Harmful to terrestrial vertebrates.

** There is some data on Lonza SDS but not sure re formulation.

Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method: Wherever possible completely use material by using according to label instructions. Dispose of unwanted product and wastes from spillages as hazardous substances in accordance with local and national regulations using a licensed waste disposal company. Triple rinse containers and add rinsate to spray tank before puncturing and offering for recycling or landfill.

Precautions: Do not allow product to enter waterways.

Disposal methods to avoid: Do not burn product or container.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2012



Road and Rail Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Terbuthylazine).

Air Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Terbuthylazine).

Marine Transport

UN No: 3082
 Class-primary 9
 Packing Group III
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Terbuthylazine).

Special Provisions:

If the product's individual container is below 5L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15	Regulatory Information
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This substance is hazardous according to the *Hazardous Substances (Classification) Notice 2017*

EPA Approval Code: HSR100826

HSNO Classification: 6.1E(oral), 6.9B, 9.1A, 9.2A, 9.3C

HSW (HS) Regulations 2017	Trigger Quantity
Signage Trigger Quantities (Schedule 3)	100Kg (9.1A)
Emergency Response Plan (Schedule 5)	100Kg (9.1A)
Secondary Containment (Schedule 5)	100Kg (9.1A)
Tracking (Schedule 26)	Not required
HSNO Additional Controls (Restrictions of use)	
Regs 46 – 48 Restrictions on use of substances in application areas	
Regs 5(2), 6- Requirements for keeping records of use	
77A	<p>This substance must not be applied onto or into water*.</p> <p>Tyllanex must not be applied onto or into water* where "water" means water in all its physical forms, whether flowing or not, and whether over or under ground, but does not include water in any form while in a pipe, tank or cistern or water used in the dilution of the substance prior to application or water used in the dilution of the substance prior to application or water used to rinse the container after use.</p>
Hazardous Property Controls Notice 2017	
HPC Notice Part 4 Clause 47	Equipment for class 9 substances must be appropriate
HPC Notice Part 4 Clause 48	Records of application of class 9 pesticides and plant growth regulators
HPC Notice Part 3	Hazardous substances in a place other than a workplace.
HPC Notice Part 4 Subpart A	Site and storage controls for class 9 substances
HPC Notice Part 4 Subpart C	Qualifications required for application of class 9 pesticides
ACVM Act and Regulations	
ACVM Approval No	P7258
Tolerable Exposure Level (TEL)	No TEL set
Environmental Exposure Level (EEL)	No EEL set

PCBU RESPONSIBILITIES

A PCBU with management or control of work using this substance must ensure that every worker who uses, handles, manufactures, or stores this hazardous substance (including hazardous waste) is, before the worker is allowed to carry out or supervise work involving those substances, provided with adequate information, training and instruction. This includes the use of personal protective equipment to be used to minimise risks to the health and safety of workers when carrying out work using this substance.

QUALIFICATIONS REQUIRED FOR APPLICATION OF CLASS 9 SUBSTANCES

Anyone who mixes, loads, or applies this product, either by air or ground based methods, is required to be suitably qualified, or must receive guidance and, if required, assistance from a suitably qualified person. *Refer to Schedule 10 of the Hazardous Substances (Hazardous Property Controls) notice 2017 for a list of suitable qualifications.*

RECORD KEEPING

Where 3 kg or more of the substance is applied within 24 hours, in a place where the substance is likely to enter air or water and leave the application area, a PCBU with management or control of the substance must ensure that a written record is kept of each application of the substance. *Refer to Part 4 Clause 48 of the Hazardous Substances (Hazardous Property Controls) notice 2017 for details of information that must be recorded*

Section 16

Other Information

Glossary

EC50	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
LC50	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD50	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact the New Zealand distributor, if further information is required.

