

Infosafe No™ 3NV8S Issue Date : April 2024 ISSUED by NUFARMNZ

Product Name **NUFARM TERBUHEX**

Classified as hazardous

Section 1 - Identification

Product Identifier	NUFARM TERBUHEX
Product Code	00665
Product Type	Herbicide
Company Name	Nufarm NZ
Address	Central Park, Building 3, Level 4, 666 Great South Road Ellerslie Auckland 1051 New Zealand
Telephone/Fax Number	Tel: 0-9-270 4150
Emergency Phone Number	0800 651 911
Email	nzinfo@nufarm.com
Recommended uses and any restrictions on use or supply	For selective weed control in forestry and non-selective weed control in industrial situations.
Other Information	This SDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture	Eye irritation Category 2 Specific target organ toxicity - repeated exposure: Category 2 Hazardous to the aquatic environment acute Category 1 Hazardous to the aquatic environment chronic Category 1 Hazardous to the terrestrial environment: Hazardous to soil organisms
Signal Word (s)	WARNING
Hazard Statement (s)	H319 Causes serious eye irritation. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life (acute). H410 Very toxic to aquatic life with long lasting effects (chronic). H421 Very toxic to the soil environment.
Precautionary Statement – General	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.
Pictogram (s)	Exclamation mark, Health hazard, Environment



Precautionary Statement – Prevention	P260 Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
Precautionary Statement – Response	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P314 Get medical advice/attention if you feel unwell. P337+P313 If eye irritation persists: Get medical advice/attention. P391 Collect spillage.
Precautionary Statement – Disposal	P501 Dispose of contents/container to an approved landfill.

Section 3 - Composition and Information on Ingredients

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Chemical Liquid

Characterization

Ingredients

<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
Terbutylazine	5915-41-3	42.5 % w/v
Oxirane, methyl-, polymer with oxirane, monobutyl ether	9038-95-3	0-<10 % w/v
Hexazinone	51235-04-2	7.5 % w/v
Preservatives	5596-84-9	0.1 % w/v
Non-hazardous ingredients	Proprietary	Balance to volume.

Section 4 - First Aid Measures

First-aid Measures	For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if the victim is not breathing. Use mouth-to-nose rather than mouth-to-mouth. Obtain medical attention.
Inhalation	Remove to fresh air and keep at rest in a position comfortable for breathing. Apply artificial respiration if not breathing. Call doctor if you feel unwell.
Ingestion	Do NOT induce vomiting. Rinse mouth. Call the POISON CENTRE or a doctor if you feel unwell.
Skin	Remove contaminated clothing and flush skin and hair with running water. If skin irritation occurs, get medical advice/ attention.
Eye	Rinse cautiously for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing. If eye irritation persists, get medical attention/advice.
First-aid Facilities	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.
Advice to Doctor	Treat symptomatically.
Other Information	FIRST AID FACILITIES: Eye wash facilities and safety shower should be available.

Section 5 - Firefighting Measures

Suitable Extinguishing Media	Alcohol resistant foam is preferred firefighting medium but if it is not available, standard foam can be used. Use extinguishing media suitable for surrounding environment. Prevent extinguishing media from entering drains.
Hazards from Combustion Products	Information is not available.
Special protective equipment for fire-fighters	Full protective clothing and self-contained breathing apparatus.
Specific Methods	Self-contained breathing apparatus with full face-piece and protective clothing. Cool fire exposed containers with water spray.
Specific hazards arising from the chemical	Information is not available.
Hazchem Code	3Z
Decomposition Temperature	Information is not available.

Section 6 - Accidental Release Measures

Spills and Disposal	Spills may be slippery and should be cleaned up immediately. Contain spillage, then cover / absorb with inert, non-combustible absorbent material (attapulgate or similar). Collect and place in suitable sealed, labelled containers for disposal. Wash area with water and absorb with further inert material. See Section 13 for details on disposal.
Personal Protection	Exclude non-essential people from the area. Wear Personal Protective Equipment (PPE) as detailed in Section 8 of the SDS.

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Environmental Precautions Prevent product from entering waterways or drains.

Section 7 - Handling and Storage

Precautions for Safe Handling The person mixing or applying this product must be a 'Qualified Contractor' or a 'Qualified Person'. The spray mixture may also be prepared by a 'Qualified Loader'. It is the duty of the PCBU that a person who uses, handles, manufactures or stores a hazardous substance (including hazardous waste) is provided information, instruction and training in accordance with Regulation 4.5 of the Health and Safety at work (Hazardous Substances) Regulations 2017. Avoid skin and eye contact and inhalation of spray mist. BEWARE: Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants. Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area. CERTIFIED HANDLER: Is not required. TRACKING: Is not required. RECORD KEEPING: Records of use as described in NZS 8408 Management of Agrichemicals must be kept if 3 litres or more of NUFARM TERBUHEX is applied within 24 hours.

Conditions for safe storage, including any incompatibilities Store in original container, tightly closed, in a secure, dry, well-ventilated area away from foodstuffs, fertilisers or seeds. Ensure the product remains below 30°C by storing in a cool area, avoiding direct sunlight and other sources of heat. Storage must be in accordance with NZS 8409 Management of Agrichemicals. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Stores containing 100 litres or more of NUFARM TERBUHEX require secondary containment, signage and an emergency response plan.

Section 8 - Exposure Controls and Personal Protection

Occupational Exposure Limits (OEL) Information is not available.

Other Exposure Information Avoid inhalation. Use in well ventilated area.

Appropriate Engineering Controls Information is not available.

Respiratory Protection Respiratory protection is not required if good ventilation is maintained. Where an inhalation risk exists, wear a Type A (Organic-Vapour) respirator.

Eye Protection Wear eye/face protection.

Personal Protective Equipment Wear chemically resistant gloves, coveralls, socks and chemical-resistant footwear.

Hygiene Measures Do not eat, drink or smoke while working with this product. Remove clothing that becomes soaked or contaminated and wash before reuse. Wash hands and face before breaks and after work.

Section 9 - Physical and Chemical Properties

Form Liquid

Appearance White to beige viscous liquid.

Odour Information is not available.

Decomposition Temperature Information is not available.

Solubility in Water Terbutylazine = 8.5 mg/L, Hexazinone = 3.3 g/L@20°C.

pH 6.0 - 8.0

Vapour Pressure Information is not available.

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Vapour Density (Air=1)	Information is not available.
Odour Threshold	Information is not available.
Partition Coefficient: n-octanol/water	Information is not available.
Flash Point	Information is not available.
Flammability	Non flammable.
Auto-ignition Temperature	Information is not available.
Flammable Limits - Lower	Information is not available.
Flammable Limits - Upper	Information is not available.
Initial Boiling Point and Boiling Range	Information is not available.
Kinematic Viscosity	Information is not available.
Particle Characteristics	Information is not available.
Relative Density	1.11 g/ml @ 25°C (typical)
Melting/Freezing Point	Information is not available.
Solubility	Suspension Concentrate.
Other Information	(SC) Suspension Concentrate

Section 10 - Stability and Reactivity

Chemical Stability	Stable under normal storage conditions in original container for two years.
Conditions to Avoid	Information is not available.
Incompatible Materials	Avoid strong acids/bases, oxidising and reducing agents.
Hazardous Decomposition Products	Thermal decomposition may produce toxic fumes and compounds.

Section 11 - Toxicological Information

Toxicology Information	No specific toxicological data is available for this product. Data below is for constituents.
Acute Toxicity - Oral	LD50 (rats) 1503 mg/kg for terbuthylazine. LD50 (Guinea pig) 860 mg/kg for hexazinone.
Acute Toxicity - Inhalation	LC50 (rats) >5.3mg/L (4 hours) for terbuthylazine. LC50 (rat) 3.94 mg/L for hexazinone.
Acute Toxicity - Dermal	LD50 (rats) >2000mg/kg for terbuthylazine. LD50 (rabbit) >5278 mg/kg for hexazinone.
Skin	May cause mild skin irritation.
Corrosion/Irritation	
Serious Eye Damage/Irritation	Causes serious eye irritation.
Respiratory Sensitisation	Information is not available.
Skin Sensitisation	Information is not available.
Germ Cell Mutagenicity	Information is not available.
Carcinogenicity	Information is not available.

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Reproductive Toxicity	Information is not available.
STOT - Single Exposure	Information is not available.
STOT - Repeated Exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration Hazard	Information is not available.
Other Information	The Australian Acceptable Daily Intake (ADI) for terbuthylazine for a human is 0.03 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.35 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Aust Govt Dept. of APVMA, 'ADI List', Edition 4/2023). The Australian Acceptable Daily Intake (ADI) for hexazinone for a human is 0.1 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 10 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Aust Govt Dept. of APVMA, 'ADI List', Edition 4/2023).

Section 12 - Ecological Information

Ecotoxicity	Very toxic to aquatic life with long lasting effects. Very toxic to the soil environment.
Persistence and Degradability	Not readily degradable.
Mobility	Information is not available.
Bioaccumulative Potential	No.
Other Precautions	This product must be under the control of a suitably qualified handler during mixing, loading and use. This product must not be applied directly into or onto water. Avoid contamination of any waterways with product or empty container. Very toxic to some plant species. Spray drift hazard ? may cause serious damage to other desirable plants.
Acute Toxicity - Fish	LC50 (96hr, Rainbow Trout) 3.4 mg/L for active ingredient terbuthylazine.
Acute Toxicity - Algae	EC50 (5day, Selenastrum capricornutum) 3.2 ppb (0.0032 mg/L) for active ingredient terbuthylazine. EC50 (5day, Selenastrum capricornutum) 7.0 ppb (0.007 mg/L) for active ingredient hexazinone.
Acute Toxicity - Other Organisms	LC50 (96hr, Mysidopsis bahia) 0.109 mg/L for active ingredient terbuthylazine. LC50 (96hr, Grass Shrimp) 78 mg/L for active ingredient hexazinone.

Section 13 - Disposal Considerations

Product Disposal	Dispose of by using product as intended, according to the label directions. If this is not possible, for small amounts, absorb with inert, non-combustible absorbent material (attapulgate or similar). Collect and place in a suitable sealable, labelled container and safely dispose of at an approved landfill. For large amounts contact your supplier or chemical recycling facility.
Container Disposal	Triple rinse container and add residue to spray tank. Return empty container to an Agrecovery collection point for disposal, or puncture and dispose of at an approved facility. Do NOT burn. Do not use the container for any other purpose.

Section 14 - Transport Information

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
UN Number	3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (terbuthylazine and hexazinone)
Hazard Class	9

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Hazchem Code	3Z
Packaging Method	-
Packing Group	III
EPG Number	-
IERG Number	47
IMO Marine Pollutant	Yes. Environmentally Hazardous Substance mark required.
IMDG EMS	F-A, S-F
Other Information	Segregation: Check the latest Land Transport Rule Dangerous Goods Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.

Section 15 - Regulatory Information

National and or International Regulatory Information	This product does not require registration under the ACVM Act. Approved pursuant to the HSNO Act 1996, Approval Code HSR000492 See www.epa.govt.nz for approval controls.
Packaging and Labelling	WARNING KEEP OUT OF REACH OF CHILDREN READ LABEL BEFORE USE FOR FORESTRY AND NON-CROPLAND AREAS ONLY

Section 16 - Any Other Relevant Information

Date of preparation or last revision of SDS	New SDS prepared in April 2024.
Contact Person/Point	IN AN EMERGENCY, DIAL 111 - FIRE OR POLICE 24Hr Tollfree Emergency No: 0800 651 911 24Hr Emergency No: National Poisons Centre Phone: 0800 764 766 ...End Of MSDS...

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