

# Safety Data Sheet

according to WHS Regulations

Printing date 24.05.2018

Revision: 24.05.2018

## 1 Identification

**Product Name:** GENFARM TERBUTHYLAZINE 875 WG HERBICIDE**Other Means of Identification:** Mixture**Recommended Use of the Chemical and Restriction on Use:** Agricultural herbicide**Details of Manufacturer or Importer:**

Landmark Operations Limited  
 Suite 3, Level 1, Building B  
 11 Talavera Road  
 Macquarie Park NSW 2113

**Phone Number:** 02 9889 5400**Emergency telephone number:** National Poison Information Centre: 13 11 26

## 2 Hazard(s) Identification

**Hazardous Nature:**

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)



environment

Aquatic Acute 1      H400 Very toxic to aquatic life.

Aquatic Chronic 1      H410 Very toxic to aquatic life with long lasting effects.



Acute Toxicity (Oral) 4      H302 Harmful if swallowed.

**Signal Word** Warning**Hazard Statements**

H302 Harmful if swallowed.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary Statements**

P264      Wash hands thoroughly after handling.

P270      Do not eat, drink or smoke when using this product.

P273      Avoid release to the environment.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330      Rinse mouth.

P391      Collect spillage.

P501      Dispose of contents/container in accordance with local/regional/national regulations.

## 3 Composition and Information on Ingredients

**Chemical Characterization: Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.**Hazardous Components:**

CAS: 5915-41-3	Terbutylazine	87.5%
	Aquatic Acute 1, H400; Aquatic Chronic 1, H410;  Acute Toxicity (Oral) 4, H302	

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## 4 First Aid Measures

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

**Skin Contact:**

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

**Eye Contact:**

In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Seek medical attention if symptoms occur.

**Ingestion:**

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

**Symptoms Caused by Exposure:**

Inhalation: May cause mild respiratory irritation.

Skin Contact: May cause mild skin irritation.

Eye Contact: May cause mild eye irritation.

Ingestion: May cause mild gastrointestinal irritation.

## 5 Fire Fighting Measures

**Suitable Extinguishing Media:**

Water fog, foam, dry chemical or carbon dioxide. Do not use full water jet as it may scatter the material.

**Specific Hazards Arising from the Chemical:**

Hazardous combustion products include oxides of carbon and nitrogen, hydrogen cyanide, other nitrogen compounds, hydrogen chloride, other chlorine compounds and smoke.

This product is not flammable, but will burn if heated. May form explosive dust clouds in air.

Containers close to fire should be removed if safe to do so.

**Special Protective Equipment and Precautions for Fire Fighters:**

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

## 6 Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:**

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots.

Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.

**Environmental Precautions:**

In the event of a major spill, prevent spillage from entering drains or water courses.

**Methods and Materials for Containment and Cleaning Up:**

Stop leak if safe to do so and sweep granules into a pile and shovel into drums for subsequent disposal. Avoid generating dust. Consider vacuuming if appropriate. Provide adequate ventilation. After spills, wash area with water.

## 7 Handling and Storage

**Precautions for Safe Handling:**

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of dust.

Food, beverages and tobacco products should not be stored or consumed where this material is in use.

Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close

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proximity to points of potential exposure.

**Conditions for Safe Storage:**

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from direct sunlight. Keep away from strong oxidising agents, strong acids and strong bases.

### 8 Exposure Controls and Personal Protection

**Exposure Standards:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Engineering Controls:** Ensure adequate ventilation of the working area.

**Respiratory Protection:**

Respiratory protection is not required under normal use conditions.

Where an inhalation risk exists (e.g. when mixing), wear a Class P1 (particulate) respirator. At high dust levels, wear a powered air purifying respirator (PAPR) with Class P3 (Particulate) filter or an air-line respirator or a full-face Class P3 (particulate) respirator. See Australian/New Zealand Standards AS/NZS 1715 and 1716 for more information.

**Skin Protection:**

PVC or rubber gloves are recommended. See Australian/New Zealand Standard AS/NZS 2161 for more information.

When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

**Eye and Face Protection:**

Eye and face protectors for protection against dust. See Australian/New Zealand Standard AS/NZS 1337 for more information.

### 9 Physical and Chemical Properties

**Appearance:**

**Form:** Granulated solid

**Colour:** Off-white

**Odour:** Faint

**Odour Threshold:** No information available

**pH-Value:** No information available

**Melting point/freezing point:** 177 - 179 °C

**Initial Boiling Point/Boiling Range:** No information available

**Flash Point:** Not applicable

**Flammability:** Product is not flammable.

**Auto-ignition Temperature:** No information available

**Decomposition Temperature:** No information available

**Explosion Limits:**

**Lower:** No information available

**Upper:** No information available

**Vapour Pressure:** Negligible at normal ambient temperatures.

**Relative Density:** No information available

**Vapour Density:** Not applicable.

**Evaporation Rate:** Not applicable

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**Solubility in Water at 25 °C:** 8.5 mg/l (Terbuthylazine)  
Granules are wettable.

**Partition Coefficient (n-octanol/water):** No information available

**Viscosity:** Not applicable

## 10 Stability and Reactivity

**Possibility of Hazardous Reactions:** Hazardous polymerisation will not occur.**Chemical Stability:** Stable at ambient temperature and under normal conditions of use.**Conditions to Avoid:** Direct sunlight.**Incompatible Materials:** Strong oxidising agents, strong acids and strong bases.**Hazardous Decomposition Products:**

Oxides of carbon and nitrogen, hydrogen cyanide, other nitrogen compounds, hydrogen chloride, other chlorine compounds and smoke.

## 11 Toxicological Information

**Toxicity:****LD<sub>50</sub>/LC<sub>50</sub> Values Relevant for Classification:****CAS: 5915-41-3 Terbuthylazine**

Oral	LD <sub>50</sub>	1,590-2,000 mg/kg (rat)
Dermal	LD <sub>50</sub>	>2,000 mg/kg (rat)

**Acute Health Effects****Inhalation:** May cause mild respiratory irritation.**Skin:** May cause mild skin irritation.**Eye:** May cause mild eye irritation.**Ingestion:** May cause mild gastrointestinal irritation.**Skin Corrosion / Irritation:** Based on classification principles, the classification criteria are not met.**Serious Eye Damage / Irritation:** Based on classification principles, the classification criteria are not met.**Respiratory or Skin Sensitisation:** Based on classification principles, the classification criteria are not met.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:** This product does NOT contain any IARC listed chemicals.**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.**Specific Target Organ Toxicity (STOT) - Single Exposure:**

Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**

Based on classification principles, the classification criteria are not met.

**Aspiration Hazard:** Based on classification principles, the classification criteria are not met.**Chronic Health Effects:** No information available**Existing Conditions Aggravated by Exposure:** No information available**Additional toxicological information:**

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The Australian Acceptable Daily Intake (ADI) for terbuthylazine for a human is 0.003 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL 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: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2018).

Animal studies have shown that terbuthylazine may cause carcinogenic, developmental and reproductive effects in animals, but these effects are unlikely to be relevant to humans.

## 12 Ecological Information

### Ecotoxicity:

LD50 (Oral) &gt;1000 mg/kg (ducks and quail)

LD50 (8 day dietary) &gt;5620 ppm (ducks and quail)

LD50 (Oral and contact) &gt;100µg/bee (honeybees)

LC50 (7 day) &gt;200 mg/kg soil (worms)

### Aquatic toxicity:

Very Toxic to aquatic life with long lasting effects.

### CAS: 5915-41-3 Terbuthylazine

LC<sub>50</sub>/96 h 3.8-4.6 mg/l (rainbow trout)

7 mg/l (carp)

7.6 mg/l (bluegill)

LC<sub>50</sub>/48 h 21 - 50.9 mg/l (daphnia)

**Persistence and Degradability:** Half life in soil is expected to be 30 - 60 days in biologically active soil.

**Bioaccumulative Potential:** Bioaccumulation is not expected to occur.

**Mobility in Soil:** This product is strongly adsorbed by soil. Terbuthylazine is only slightly mobile in soil.

**Other adverse effects:** No further relevant information available.

## 13 Disposal Considerations

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.

### Special Precautions for Landfill or Incineration:

Please consult your state Land Waste Management Authority for more information.

## 14 Transport Information

### UN Number

ADG

Not subject to the ADG Code when transported in Australia by Road or Rail in packages 500kg(L) or less; or IBCs (refer to SP AU01).

UN3077

### IMDG, IATA

### Proper Shipping Name

ADG

IMDG

Not regulated

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Terbuthylazine), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Terbuthylazine)

IATA

### Dangerous Goods Class

ADG Class:

IMDG Class:

Not regulated

9 Miscellaneous dangerous substances and articles.

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<b>Packing Group:</b>	Not regulated
<b>ADG</b>	III
<b>IMDG, IATA</b>	
<b>Marine pollutant:</b>	Yes Symbol (fish and tree)
<b>EMS Number:</b>	F-A,S-F
<b>Hazchem Code:</b>	2Z
<b>Special Provisions:</b>	274, 331, 335, 375, AU01
<b>Limited Quantities:</b>	5 kg
<b>Packagings &amp; IBCs - Packing Instruction:</b>	P002, IBC08, LP02
<b>Packagings &amp; IBCs - Special Packing Provisions:</b>	PP12, B3
<b>Portable Tanks &amp; Bulk Containers - Instructions:</b>	T1, BK2, BK3
<b>Portable Tanks &amp; Bulk Containers - Special Provisions:</b>	TP33

### 15 Regulatory Information

#### Australian Inventory of Chemical Substances:

CAS: 5915-41-3 | Terbutylazine

#### Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 6

### 16 Other Information

**Date of Preparation or Last Revision:** 24.05.2018**Prepared by:** MSDS.COM.AU Pty Ltd[www.msds.com.au](http://www.msds.com.au)

#### Abbreviations and acronyms:

ADG: Australian Dangerous Goods  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 LC<sub>50</sub>: Lethal concentration, 50 percent  
 LD<sub>50</sub>: Lethal dose, 50 percent  
 IARC: International Agency for Research on Cancer  
 STEL: Short Term Exposure Limit  
 TWA: Time Weighted Average  
 NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)  
 Acute Toxicity (Oral) 4: Acute toxicity – Category 4  
 Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1  
 Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1

#### Disclaimer

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016"

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