

1. IDENTIFICATION

Product Identifier: **Sinbar® Herbicide**

Other Means of Identification: Terbacil

Recommended Use of the Chemical and Restrictions on Use: **Herbicide**

Details of Manufacturer or Importer: AgNova Technologies Pty Ltd
Unit 4, 482 Kingsford Smith Drive
Hamilton Qld 4007 Australia
(03) 9899 8100
agnova.com.au

Emergency Phone Number: 1800 033 111 (24 hrs) IXOM ERS
13 11 26 Poisons Information Centre

2. HAZARD(S) IDENTIFICATION

GHS CLASSIFICATIONS

WARNING

Causes eye irritation (H320)
May be harmful if swallowed (H303)
May be harmful in contact with skin (H313)
May be harmful if inhaled (H333)
Very toxic to aquatic life with long lasting effects (H400+H410)



HAZARD CLASSIFICATION

Health Hazards	Category	Physical Hazards	Category
Eye Damage/Irritation	2B	None	--
Acute toxicity, oral	5		
Acute toxicity, dermal	5	Environmental Hazards	Category
Acute toxicity, inhalation	5	Hazardous to the Aquatic Environment – Acute	1
		Hazardous to the Aquatic Environment – Chronic	1

HAZARDS NOT REQUIRING CLASSIFICATION

None



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PRECAUTIONARY STATEMENTS

Wash hands and exposed skin thoroughly after handling. Do not touch eyes. Wear protective gloves. (P264+P265+P280)

Avoid breathing dust. Use only outdoors or in a well-ventilated area. (P261+P271)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical help. (P305+P351+P338+P337+P317)

IF SWALLOWED: Get medical help. (P301+P317)

IF ON SKIN: Get medical help. (P302+P317)

IF INHALED: Get medical help. (P304+P317)

Avoid release to the environment not in accordance with the product label. Collect spillage. (P273+P391)

Dispose of contents / container using instructions in the product label and in accordance with local / Federal regulations. (P501)

OTHER CLASSIFICATIONS

ADG Classification: Not classified as Dangerous Goods for land transport under the Australian Code for Transport of Dangerous Goods by Road and Rail, 7th Edition, special provision AU01 – refer Section 14

SUSMP Classification: Not scheduled
(Standard for Uniform Scheduling of Medicines and Poisons)

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Concentration (% w/w)
Terbacil [3-Tert-butyl-5-chloro-6-methyluracil, 2,4(1H,3H)-Pyrimidinedione]	5902-51-2	80

4. FIRST AID MEASURES

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

Description of Necessary First Aid Measures:

Ingestion: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control centre or doctor. Do not give anything by mouth to an unconscious person.



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Inhalation:	Move person to fresh air. If person is not breathing, call 000, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.
Skin Contact:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.
Eye Contact:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.
First Aid Facilities:	Provide washing facilities in the workplace.
Symptoms Caused by Exposure:	No data available.
Medical Attention and Special Treatment:	Not specified.

5. FIREFIGHTING MEASURES

Suitable Extinguishing Equipment:	Use firefighting media appropriate for combustibles involved in the fire.
Specific Hazards Arising from the Chemical:	May be ignited by heat or open flame. Like most organic powders or crystals, under severe dusting conditions, this material may form explosive mixtures in air.
Special Protective Equipment and Precautions for Firefighters:	Firefighters should wear self-contained positive pressure breathing apparatus and full fire-fighting turnout gear. Evacuate area of all unnecessary personnel and fight fire from a safe distance upwind. Contain contaminated water / firefighting water; do not allow to enter drains or waterways. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.



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6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:	Isolate area and keep unnecessary and unprotected personnel from entering. Wear suitable personal protective clothing and equipment as described in Section 8 of this document. Ensure adequate ventilation.
Environmental Precautions:	Contain spillage and minimise spread. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Keep out of drains, sewers, ditches and water ways. Do NOT contaminate water when disposing of rinse waters.
Methods and Materials for Containment and Cleaning Up:	Avoid creating dust during cleanup. Sweep, scoop or shovel spilled material and place into suitable closed containers for reuse or disposal. After decontamination, spill area can be washed with water. Collect washwater for approved disposal. Place leaking containers in oversize leakproof drums for transport.

7. HANDLING AND STORAGE

Precautions for Safe Handling:	Avoid contact with eyes, skin or clothing. Keep out of reach of children. DO NOT re-use container.
Conditions for Safe Storage, including any Incompatibilities:	Store in the closed, original container in a dry, well ventilated area, as cool as possible out of direct sunlight. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:	None established.
Biological Monitoring:	No data available.
Engineering Controls:	General ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.



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Individual Protection Measures, for example, Personal Protective Equipment (PPE):

Use only outdoors or in well-ventilated area.
When preparing and using spray, wear face shield or goggles, wear protective apron and gloves.
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling product.
Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Crystalline solid
Odour:	Odourless
Vapour Pressure:	No data available
Vapour Density:	No data available
Bulk Density:	Loose – 336-384 kg/m ³
Boiling Point:	No data available
Melting/Freezing Point:	175-177°C
Solubility:	710 ppm at 25°C
pH:	8.5 - 9.5 (in di-water @ 25°C)
Flash Point:	No data available
Flammability (explosive) Limits:	No data available
Auto-Ignition Temperature:	No data available
Partition Coefficient:	No data available
Decomposition Temperature:	Not determined

10. STABILITY AND REACTIVITY

Reactivity:	Not reactive under normal temperature and storage conditions.
Chemical Stability:	Stable under normal temperature and storage conditions.
Possibility of Hazardous Reactions:	Will not occur.
Conditions to Avoid:	Exposure to extreme heat or open flames.



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Incompatible Materials: Avoid all sources of ignition, heat or open flame. Avoid prolonged exposure to excessive temperatures. Do not store near combustibles.

Hazardous Decomposition Products: No data available.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Oral Toxicity: LD₅₀ Rat (female) 951 mg/kg

Dermal Toxicity: LD₅₀ Rabbit >5000 mg/kg

Inhalation Toxicity: LC₅₀ Rat >5.3 mg/L (4 hr exposure)

Skin Corrosion/Irritation: Slight skin irritant in animals

Serious Eye Damage/Irritation: Moderate eye irritant in animals.

Respiratory or Skin Sensitisation: Not a contact sensitiser in animals.

Reproductive Toxicity: There was no significant difference between the control and experimental groups in pregnancy rate or in the number of nidations, resorptions, and death. Maternal and embryo-fetal toxicity only was demonstrated at the 600 mg/kg dose level. Thus, terbacil was not demonstrated to represent a unique hazard to the conceptus.

Germ Cell Mutagenicity: Not mutagenic or genotoxic.

Carcinogenicity: Terbacil is classified as a Group E carcinogen (no evidence of carcinogenicity in animal studies). Not listed by ACGIH (American Conference of Governmental Industrial Hygienists), IARC (International Agency for Research on Cancer), NTP (National Toxicology Program) or OSHA (Occupational Safety & Health Administration).



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Specific Target Organ Toxicity (STOT) – single exposure: No data available.

Specific Target Organ Toxicity (STOT) – repeated exposure: No data available.

Aspiration Hazard: No data available.

12. ECOLOGICAL INFORMATION

Terbacil is highly toxic to vascular and non-vascular plants and to aquatic invertebrates.

This information is based on the active ingredient: Terbacil

Ecotoxicity:

Aquatic Toxicity:

96 hr LC₅₀ Rainbow trout = 46.2 mg/L
96 hr LC₅₀ Sheepshead Minnow = 108.5 mg/L
5-day EC₅₀ Algae = 0.011 mg/L
14-day EC₅₀ Duckweed = 0.14 mg/L
90-day NOAEC Rainbow trout = 1.2 mg/L
NOAEC Algae = 0.0071 mg/L
NOAEC Duckweed = 0.065 mg/L

Daphnia Toxicity:

48 hr EC₅₀ Water flea (*Daphnia magna*) = 65 mg/L
21-day NOAEC Water flea (*Daphnia magna*) = 0.05 mg/L

Bird Toxicity:

Oral 14-day LD₅₀ Bobwhite quail 2250 mg/kg (bodyweight)
21-week NOAEC Mallard duck 1800 mg/kg (diet)

Bee Toxicity:

Contact LD₅₀ Honeybee >193.4 µg a.i./bee

13. DISPOSAL CONSIDERATIONS

Disposal Containers and Methods:

Triple rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on-site. Break, crush, puncture or bury empty containers in a local authority landfill. If not available bury the container below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots.



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Empty containers and product should not be burnt.

DO NOT dispose of undiluted chemical on site.

If recycling, replace cap and return clean containers to recycler or designated collection point.

If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility.

If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations.

DO NOT burn empty containers or product.

For minor spills, leaks, etc., follow all precautions indicated on the product label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire or other emergency, phone 1800 033 111 (24 hrs).

14. TRANSPORT INFORMATION

Road and Rail Transport (ADG):	Not classified as Dangerous Goods under the ADG7 when being transported in IBCs or other receptacles <500 L (kg), (Special Provision AU01).
Marine Transport (IMDG):	Classified as Dangerous Goods for transport by sea according to the criteria of the UN Model Regulations for Transport of Dangerous Goods 13 th Edition
Air Transport (IATA):	Classified as Dangerous Goods for transport by air according to the criteria of the UN Model Regulations for Transport of Dangerous Goods 13 th Edition
UN Number:	3077
Proper Shipping Name or Technical Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Terbacil)
Transport Hazard Class:	9
Packing Group Number:	III



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Environmental Hazards for Transport Purposes: Marine pollutant.
Non-bulk packaging (max capacity of 450 L or less for liquids or 400 kg or less for solids) transported by motor vehicle, rail car or aircraft are excepted from all Marine Pollutants regulations and therefore treated as non-hazardous material.

All bulk shipments or any shipment transported partially or entirely by vessel are treated as regulated Marine Pollutants and are shipped according to the requirements listed above.

Special Precautions for User: Not specified.

Additional Information: None

Hazchem Code: 2Z

15. REGULATORY INFORMATION

APVMA Registered according to the Agricultural and Veterinary Chemicals Code Act 1994 (Cwlth).
APVMA Product Number: 45853

SUSMP Not scheduled

16. OTHER INFORMATION

Date of Preparation or Revision: 23 December 2022

Reason for Revision: Update to GHS7

Abbreviations and Acronyms:
ADG7 – Australian Dangerous Goods Code for Road and Rail Transport, 7th Edition
APVMA – Australian Pesticides and Veterinary Medicines Authority
EC – Effective Concentration
GHS – Globally Harmonised System of Classification and Labelling of Chemicals
IBC – Intermediate Bulk Container
LC – Lethal Concentration



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LD – Lethal Dose

NIOSH – National Institute of Occupational Safety and Health (USA)

NOAEC – No Observed Adverse Effect Concentration

SUSMP – Standard for the Uniform Scheduling of Medicines and Poisons

Data Sources: Manufacturer product safety data and published data

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.

The opinions expressed herein are those of qualified experts with the manufacturer. Since the use of this information and of these opinions and the conditions of use of this product are not within the control of AgNova Technologies Pty Ltd, it is the user's obligation to determine the conditions of safe use of the product.

END OF SDS