

**SINBAR® HERBICIDE**

Date of Issue: December 2016



**1. IDENTIFICATION**
**Product Identifier:** Sinbar® Herbicide

**Other Means of Identification:** Terbacil (3-Tert-butyl-5-chloro-6-methyluracil)

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

**Details of Manufacturer or Importer:** AgNova Technologies Pty Ltd  
 Suite 3/935 Station Street  
 Box Hill North Vic 3129 Australia  
 (03) 9899 8100  
[www.agnova.com.au](http://www.agnova.com.au)
**Emergency Phone Number:** 1800 033 111 (24 hrs)

**2. HAZARD(S) IDENTIFICATION**
**GHS Classification of the Active Substance:**

Pictogram	Hazard Statements	Precautionary Statements
	Harmful if swallowed Harmful if inhaled. May be harmful in contact with skin.	Do not eat, drink or smoke when using this product. Use only outdoors or in well-ventilated area. Wear protective apron, gloves and eye and face protection. Do not store near combustibles, ignition sources or flames. Wash thoroughly after handling product.
	Harmful to aquatic life with long lasting effects.	Do not allow release to aquatic waterways.

**Signal Word:** Warning

**Hazard-Determining Component(s) of Labelling:** Terbacil

**SINBAR® HERBICIDE**

Date of Issue: December 2016

**ADG Classification:** Not classified as Dangerous Goods for land transport under the Australian Code for Transport of Dangerous Goods by Road and Rail – refer section 14

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

**3. COMPOSITION AND INFORMATION ON INGREDIENTS**

<b>Ingredients:</b>	<b>CAS Number:</b>	<b>Concentration (% w/w):</b>
Terbacil (3-Tert-butyl-5-chloro-6-methyluracil)	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.

**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

**SINBAR® HERBICIDE**

Date of Issue: December 2016

**Medical Attention  
and Special  
Treatment:** Not specified

**5. FIRE FIGHTING MEASURES**

**Suitable  
Extinguishing  
Equipment:** Use firefighting measures that suit the environment.

**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 Fire  
Fighters:** Firefighters should wear self-contained breathing apparatus and full fire-fighting turnout gear. Do not allow extinguishing media into waterways or storm water systems.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal  
Precautions,  
Protective  
Equipment and  
Emergency  
Procedures:** Use personal protective equipment specified in Section 8. Isolate the release area and deny entry to unnecessary, unprotected and untrained personnel.

**Environmental  
Precautions:** Terbacil has properties that may result in surface water contamination via dissolved runoff and runoff erosion. Practices should be followed to minimize the potential for dissolved runoff and/or runoff erosion. This chemical also has properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

**Methods and  
Materials for  
Containment and  
Cleaning Up:** Absorb with liquid-binding material (ie. sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to section 13.  
Ensure adequate ventilation.

## SINBAR® HERBICIDE

Date of Issue: December 2016

**7. HANDLING AND STORAGE**

<b>Precautions for Safe Handling:</b>	Ensure good ventilation/exhaustion at the workplace. Avoid prolonged or repeated exposure. Refer to the Product Label for further information. Avoid dust generation. Keep away from heat, open flame, or ignition sources. Keep protective respiratory device available.
<b>Conditions for Safe Storage, including any Incompatibilities:</b>	Store in a cool, dry place. Store in a well ventilated place. Keep away from any sources of heat or flame.

**8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

Personnel who handle this product in its end-use application should use this product in accordance with its pesticide labelling.

<b>Exposure Standards:</b>	None established
<b>Biological Monitoring:</b>	None required
<b>Engineering Controls:</b>	Ensure good ventilation in the workplace
<b>Individual Protection Measures, for example, Personal Protective Equipment (PPE):</b>	Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately.  <i>Hand and Skin Protection for use in situations where PPE is required to minimise exposure:</i> Wear butyl rubber, natural rubber, nitrile rubber, or neoprene gloves. Wear long-sleeved shirt and long pants, waterproof shoes and socks. Wash contaminated clothing before reuse.  <i>Eye Protection for use in situations where PPE is required to minimise exposure:</i> Wear tightly sealed goggles  <i>Respiratory Protection if local ventilation is inadequate:</i> Use NIOSH approved, dual cartridge respirators for dusts or mists if local ventilation is inadequate (N, R or P class filter media with NIOSH approved prefix TC-84A).

**SINBAR® HERBICIDE**

Date of Issue: December 2016

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Crystalline solid
<b>Odour:</b>	Odourless
<b>Vapour Pressure:</b>	Not applicable
<b>Vapour Density:</b>	Not applicable
<b>Bulk Density:</b>	Loose – 336-384 kg/m <sup>3</sup>
<b>Boiling Point:</b>	Not applicable
<b>Melting/Freezing Point:</b>	175-177°C
<b>Solubility:</b>	710 ppm at 25°C
<b>pH:</b>	8.5 – 9.5 (2% in di-water @ 25°C)
<b>Flash Point:</b>	Not applicable
<b>Flammability (explosive) Limits:</b>	Not applicable
<b>Auto-Ignition Temperature:</b>	Not determined
<b>Decomposition Temperature:</b>	Not determined

**10. STABILITY AND REACTIVITY**

<b>Chemical Stability:</b>	Stable under normal temperature and storage conditions
<b>Possibility of Hazardous Reactions:</b>	None known
<b>Conditions to Avoid:</b>	Exposure to extreme heat or open flames.
<b>Incompatible Materials:</b>	Avoid all sources of ignition, heat or open flame. Avoid prolonged exposure to excessive temperatures.
<b>Hazardous Decomposition Products:</b>	None known

<b>11. TOXICOLOGICAL INFORMATION</b>
--------------------------------------

**Acute Toxicity:**

**Oral Toxicity:** LD<sub>50</sub> Rat (male) 2784 mg/kg  
LD<sub>50</sub> Rat (female) 951 mg/kg

**Dermal Toxicity:** LD<sub>50</sub> Rabbit >5000 mg/kg

**Inhalation Toxicity:** LC<sub>50</sub> 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 skin sensitizer in animals

*The information below is based on the active ingredient: Terbacil*

**Germ Cell Mutagenicity:** No data available

**Carcinogenicity:** Terbacil is classified as a Group E carcinogen (no evidence of carcinogenicity in animal studies).

**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.

**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

**SINBAR® HERBICIDE**

Date of Issue: December 2016

**12. ECOLOGICAL INFORMATION**

*This information is based on the active ingredient: Terbacil*

**Ecotoxicity:**

**Aquatic Toxicity:** 96 hr LC<sub>50</sub> Bluegill sunfish = 102.9 ppm  
96 hr LC<sub>50</sub> Rainbow trout = 46.2 ppm  
72 hr EC<sub>50</sub> Green algae = 0.018 ppm

**Daphnia Toxicity:** 48 hr EC<sub>50</sub> Water flea (*Daphnia magna*) = 68 ppm

**Bird Toxicity:** Acute Oral LD<sub>50</sub> Bobwhite quail >2250 mg/kg  
Acute dietary LC<sub>50</sub> Mallard duck >5000 ppm

**Persistence and Degradability:** t<sub>1/2</sub> in water 29 to 54 days; photolytic degradation  
t<sub>1/2</sub> in soil 122 to 720 days; photolytic degradation

**Bioaccumulative Potential:** Static test in bluegills with 96 h depuration (<8 µg/g to <0.01 µg/g). Not expected to bioaccumulate in fish tissues

**Mobility in Soil:** K<sub>ad</sub> 0.39 to 1.3 mL/g  
K<sub>oc</sub> 44 to 61 mL/g  
Due to its low sorption affinity for soil, terbacil is expected to be very mobile in soil.

**Other Adverse Effects:** None known

**13. DISPOSAL CONSIDERATIONS**

**Disposal Containers and Methods:** Triple-rinse containers before disposal, as follows. Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure 2 more times.  
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.

**SINBAR® HERBICIDE**

Date of Issue: December 2016

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).

<b>14. TRANSPORT INFORMATION</b>
----------------------------------

<b>Transport Classification:</b>	<p><b>Road and Rail Transport:</b> Not dangerous goods under the ADG7 when being transported in IBCs or other receptacles &lt;500 L (kg), (Special Provision AU01).</p> <p><b>Marine and Air:</b> Classified as Dangerous Goods for transport by sea and air according to the criteria of the UN Model Regulations for Transport of Dangerous Goods 13<sup>th</sup> Edition</p>
<b>UN Number:</b>	<b>3077</b>
<b>Proper Shipping Name or Technical Name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
<b>Transport Hazard Class:</b>	9
<b>Packing Group:</b>	III
<b>Environmental Hazards for Transport Purposes:</b>	Marine pollutant
<b>Special Precautions for User:</b>	Not specified
<b>Additional Information:</b>	<b>Not specified</b>
<b>Hazchem Code:</b>	2Z



**SINBAR® HERBICIDE**

Date of Issue: December 2016

**15. REGULATORY INFORMATION**

<b>APVMA</b>	Registered according to the Agricultural and Veterinary Chemicals Act 1988. APVMA Product No. 45853.
<b>SUSMP</b>	Not scheduled

**16. OTHER INFORMATION**

<b>Trademark Information:</b>	Sinbar® is a registered trademark of Tessenderlo Kerley, Inc. All rights reserved.
<b>Abbreviations and Acronyms:</b>	ADG7 – Australian Dangerous Goods Code for Road and Rail Transport, 7 <sup>th</sup> Edition APVMA – Australian Pesticides and Veterinary Medicines Authority GHS - Globally Harmonized System of Classification and Labelling of Chemicals IBC – Intermediate Bulk Container NIOSH – National Institute of Occupational Safety and Health (USA) SUSMP – Standard for the Uniform Scheduling of Medicines and Poisons
<b>Date of Preparation or Revision:</b>	December 2016
<b>Reason for Revision:</b>	To comply with GHS
<b>Data Sources:</b>	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