

SINBAR[®]

Date of Issue: Jan 09

1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Chemical name of active ingredient(s): Terbacil as a wettable powder

Recommended use: Selective herbicide in apples, peaches, raspberries and brambles.

Supplier: Elliott Technologies Limited
PO Box 838
Pukekohe
Phone 0800 100 325

Emergency telephone number: 0800 Poison (0800 764 766) 24 Hours

2. HAZARDS IDENTIFICATION

Hazard Classification: 6.1D, 6.3A, 6.4A, 6.9B, 9.1A, 9.2A, 9.3C
Acute oral toxicant.
Skin and eye irritant.
Toxic to human target organs/systems.
Very ecotoxic in aquatic and soil environment.
Harmful to terrestrial vertebrates.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation Information on hazardous ingredients

Common name	CAS No	%
Terbacil	5902-51-2	80
Inert Ingredients	not allocated	20

4. FIRST-AID MEASURES

Description of necessary first aid measures:

Effects and symptoms

First-aid measures

Inhalation:

If inhaled, remove from exposure and have patient lie down and keep quiet. If patient is not breathing, start artificial respiration immediately. Never give anything by mouth to an unconscious person. Call a physician if necessary.

Ingestion:

If swallow do NOT induce vomiting. For advice, contact the National Poisons Centre 0800 POISON (0800764 766) or call a doctor immediately.

Skin contact:

If spilt on the skin, remove contaminated clothing and wash affected areas of skin immediately.

Eye contact:

If concentrate is splashed in eyes, flush with running water

for at least 15 minutes. Take to hospital without delay. For advice contact the National Poisons Centre 0800 POISON (0800764 766)

5. FIRE-FIGHTING MEASURES

HAZCHEM Code:	2X
Flammable properties:	Flammable Limit in Air, % by volume: LEL: 0.077 g/L.
Extinguishing media :	Water spray, foam, dry chemical, CO ₂ . Use media appropriate for surrounding material.
Hazardous thermal (de)composition products:	Dust forms explosive mixture with air.
Protection of fire-fighters:	Wear self-contained breathing apparatus. Use water spray. Cool tank/container with water spray. If area is heavily Exposed to the fire and if conditions permit, let fire burn itself out since water may increase the contamination hazard.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Use appropriate Personal Protective Equipment during clean up. (See Section 8).
Environmental precautions:	Dyke spill. Prevent liquid from entering the sewers, waterways, or low areas.
Methods for cleaning up:	Shovel or sweep up. Do Not flush with water. Place material In a clean, dry container and cover for disposal. Wash contaminated areas with water and detergent. Prevent liquid from entering sewers, waterways or low areas. Soak with sawdust, sand or other absorbent material. Shovel or sweep up. Never return to container for re-use. (See section 13 for disposal instructions).

7. HANDLING AND STORAGE

Handling:	Avoid skin and eye contact. Avoid inhaling the vapour or spray mist. Wash thoroughly after handling. Wash clothing after use.
Storage:	Store in the closed original container in a dry, well ventilated area, as cool as possible out of direct sunlight and under lock and key. Keep from contact with fertilizers, fungicides and seeds. Do not store with Classes 1,2,3,2,4 or 5 substances. Stores containing more than 100kg of this product, either alone or in aggregate with other hazardous substances are subject to requirement of an emergency management response plan, secondary containment and signage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards:	None established for formulated product.
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Engineering Controls: Use only with adequate ventilation.

Terbacil AEL (DuPont):20 mg/m³ (8 and 12 hr TWA)
TLV (ACGIH): None established
PFL (OSHA): None established

Personal protection: Avoid breathing spray mist or dust. Use respiratory equipment suitable for herbicide dust if exposure may exceed AEL value. Avoid contact with eyes and skin. Wear protective goggles, rubber gloves, boots and overalls during mixing and spraying.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid powder
Colour: Off-white
Odour: Odourless
pH: 8.5-9.5 (20g/L)
Corrosivity: Non corrosive
Oxidation properties: Not an oxidizer.
(See also sections 5 & 10)

10. STABILITY AND REACTIVITY

Stability: Stable at normal temperatures and storage conditions.
Incompatibility: No incompatibilities reasonable foreseeable.
Decomposition: Decomposition will not occur.
Polymerization: Polymerization will not occur

11. TOXICOLOGICAL INFORMATION

Acute Effects:
Skin: Repeated applications of 5,000 mg/kg (80% wettable powder) to abraded rabbit skin once a day, 5 days a week or 3 weeks, produced no adverse clinical or pathological effects. Technical terbacil produced neither irritation nor sensitisation when applied as a 15% solution to intact and abraded guinea pig skin.
Eye: Administration of the dry technical produced mild conjunctival irritation, which was reversible within 4 hours. No corneal or iritic effects were noted. A 10% propylene glycol suspension produced iritis and mild conjunctivitis, which was reversible within 48 hours. No corneal injury was noted.
Inhalation: Moderate order of toxicity.
Ingestion: Very low toxicity by ingestion

Chronic effects:

Terbacil:

In a two year feeding study (rats), the no-observable-effect level was 50 ppm. Hepatocellular hypertrophy was transitory at 250 ppm and persistent at the highest dose, which was escalated stepwise from 2,500 to 10,000 ppm during the study. Decreased body weight was also noted at 2,500 – 10,000 ppm. No evidence of compound-related oncogenicity was observed. In a two year feeding study (mouse), the no observable effect level was 50 ppm. Hepatocellular hypertrophy was noted in males at 1,250 ppm and in both sexes at the highest dose, which was increased from 5,000 to 7,500 ppm at week 54. An increased incidence of hyperplastic liver nodules was also noted in males at 5,000 – 7,500 ppm. No compound related oncogenic effects were observed.

In a two year feeding study (dog), the no observable effect level was 250ppm; a slight increase in relative liver weight was noted at the highest dose which was escalated stepwise from 2,500 to 10,000 ppm during the study.

No adverse effect on reproduction (rat) or lactation was observed during a three-generation, six-litter study at 0, 50, and 250 ppm. No abnormal histopathology was noted on examination of the F3B litters at weaning.

In a dietary study (rat) at 0, 250, 1,250 and 5,000 ppm, Terbacil was not teratogenic at any dose tested but produced embryotoxic effects at 1,250 and 5,000 ppm.

Toxicity Data:

Acute Dermal LD50 (rabbit): > 5,000 mg/kg

Terbacil:

Acute Oral LD50 (rat): > 5,000 mg/kg; < 7,500 mg/kg

Inhalation LC50 (4 hr rat): >4.4 mg/L (head only exposure)

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Terbacil

Very toxic to aquatic organisms. Avoid contamination of any water supply with chemical or empty container.

Fish

Fish LC50 (96 hr) for rainbow trout 46.2 mg/L, bluegill Sunfish 102.9 mg/L.

Daphnia magna

Daphnia LC50(48hr) 68mg/L.

Algae**Soil**

Algae LC50(96hr) 0.018mg/L. (9.1A)

EC 250 seedling plants 0.003mg/kg soil-herbicidal.

Birds

Birds dietary oral LC50 bobwhite quail > 715mg/kg, mallard duck > 5,000mg/kg

Vertebrates

Male rat acute oral LD50 1,082mg/kg. (9.3C) Bees-not toxic.

Persistence/degradability Soil

Broken down in soil by microbial decomposition, DT50 520 days. Kow log P = 1.91. Kpa 9.5 (9.2A)

13. DISPOSAL CONSIDERATIONS

Methods of disposal :

Ensure bag is completely empty and dispose of at an Approved landfill. If local regulations and wind direction permit, burn. Dispose of this product only by using in accordance with label directions. Dispose of solid contaminated material/or contaminated soil in an approved landfill. Disposal must be in accordance with applicable local regulations.

14. TRANSPORT INFORMATION

International transport regulations

International transport regulations:

DG Code: 9
UN number: 3077

Hazchem: 2X
Pack Group: III

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Terbacil)

Trade Name: Sinbar®

15. REGULATORY INFORMATION

ACVM Registered Number: PO1135
HSNO Approval Code: HSR000569

16. OTHER INFORMATION

Additional information:

Disclaimer

Trademarks