

## SAFETY DATA SHEET

According to HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

### Section 1. Identification of the material and the supplier

Product: **T-KOTE**  
 Chemical Name of Active Ing: Thiabendazole  
 Product Use: Fungicide  
 Restriction of Use: Refer to Section 15

New Zealand Supplier: **Agrisource 2000 Ltd**  
 Address: 45 Kitchener Road  
 Pukekohe, Auckland

Telephone: +64 9 237 0422  
 Emergency No: **0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 6 July 2023 v2

### Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020.

**EPA Approval No: HSR000581**

#### Pictograms



Signal Word: **Warning**

GHS Classification and Category	Hazard Code	Hazard Statement
Specific target organ toxicity – repeated exposure Cat. 2	H373	May cause damage to liver and other organs through prolonged or repeated exposure.
Hazardous to the aquatic environment acute/chronic Cat. 1	H400/H410	Very toxic to aquatic life with long lasting effects.

Prevention Code	Prevention Statement-
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P260	Do not breathe fumes, gas, mist, vapours or spray.
P273	Avoid release to the environment.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P314	Get medical advice/attention if you feel unwell.
P391	Collect spillage.

Storage Code	Storage Statement
None allocated	Store in original container tightly closed and in a locked, dry, cool, well-ventilated area, away from feed, seeds and foodstuffs. Avoid temperatures below 0°C and above 35°C.

Disposal Code	Disposal Statement
P501	Product Disposal: Ensure unwanted product is used by another operator strictly in accordance with label directions. Container Disposal: Triple rinse container and add rinsate to spray tank. Dispose of cleaned container at your local AGRECOVERY container collection point. Do not burn. Do not use container for any other purpose.  Dispose of according to Local Regulations or Authorities

### Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMB-ER.
Thiabendazole	50%	148-79-8
Inert ingredients	50%	Proprietary

### Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.
If on Skin	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
If Swallowed	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Get medical advice if breathing becomes difficult.

#### Most important symptoms and effects, both acute and delayed

Symptoms: May cause damage to organs through prolonged or repeated exposure.

### Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from products	Product contains combustible organic components and fire will produce black smoke likely to contain hazardous products of combustion. Exposure is likely to be a hazard to health.
Suitable Extinguishing media	Dry chemical, fine water spray or carbon dioxide.
Precautions for firefighters and special protective clothing	Wear protective clothing and self-contained breathing apparatus. Do not breathe smoke or gases. Do not allow run-off from firefighting to enter drains and/or water courses.
HAZCHEM CODE	3Z

## Section 6. Accidental Release Measures

### For emergency responders:

Avoid contact with skin and eyes. Do not inhale spray. Wear long sleeved shirt, long pants, waterproof gloves and safety goggles or face shield. Do not eat, drink or smoke when using. Wash hands and face before meals and after work.

### Environmental precautions:

Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways. If enters waterways notify authorities.

### Methods and material for containment and cleaning up:

In the case of spillage, contain spilled material. Keep out animals and unprotected persons. Vacuum or shovel waste into a drum. To decontaminate spill area, tools and equipment, wash with water. Dispose of drummed wastes in accordance with the requirements of Local Authorities.

## Section 7. Handling and Storage

### Precautions for Handling:

- Read carefully and follow all instructions.
- Do not breathe fumes, gas, mist, vapours or spray.
- Avoid release to the environment.
- When mixing or applying, avoid breathing dust and contact with skin and eyes.
- Wear protective clothing, gloves and goggles.
- Do not eat or drink while using.
- Wash hands and face before meals and after work.
- Wash protective clothing after work.

### Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep out of reach of children.
- Store in original container tightly closed and in a locked, dry, cool, well ventilated area, away from feed, seeds and foodstuffs.
- Store in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409).
- Packaging materials: HDPE Plastic Drum

## Section 8. Exposure Controls / Personal Protection

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA	STEL
	ppm mg/m <sup>3</sup>	ppm mg/m <sup>3</sup>

None of the components have assigned exposure limits.

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 13<sup>TH</sup> EDITION.

### Engineering Controls

Ensure ventilation is adequate, generally natural ventilation is adequate. Facilities should be equipped with an eyewash facility and safety shower.

### Personal Protection Equipment

<b>Eyes</b>	Wear protective goggles.
<b>Hands</b>	Wear PVC elbow-length gloves.
<b>Body</b>	When opening the container, preparing spray and using prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat.
<b>Respiratory</b>	Where insufficient ventilation, use suitable respiratory protection.
<b>General</b>	Avoid inhaling aerosols and vapours. Avoid contact with eyes and skin. Store work clothes and street clothes separately. Wash hand before breaks and at the end of work. Change contaminated protective clothing. Keep away from food, drinks and tobacco.

## Section 9. Physical and Chemical Properties

<b>Appearance</b>	Liquid
<b>Colour</b>	White/beige
<b>Odour</b>	Weak aromatic
<b>Odour Threshold</b>	Not available
<b>pH</b>	6.0 – 7.0
<b>Boiling Point</b>	Approx. 100°C
<b>Melting Point</b>	Not available
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	Not available
<b>Flammability</b>	Not flammable
<b>Upper and Lower Explosive Limits</b>	Not available
<b>Vapour Pressure</b>	Not available
<b>Vapour Density</b>	Not available
<b>Specific Gravity or density</b>	Approx. 1.168
<b>Solubility</b>	Soluble in water. Dispersible (20°C)
<b>Partition Coefficient:</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Approx. 600 sec (DIN 4 flow cup) (25°C)
<b>Oxidising</b>	Not an oxidiser

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	Stable under normal conditions of use.
<b>Possibility of hazardous reactions</b>	None expected.
<b>Conditions to Avoid</b>	Extreme heat or Cold.
<b>Incompatible Materials</b>	None known.
<b>Hazardous Decomposition Products</b>	May include oxides of carbon and nitrogen, hydrogen chloride, Hydrogen cyanide.

## Section 11. Toxicological Information

### Acute Effects:

<b>Swallowed</b>	Not applicable. LD50 (rat) >5000 mg/kg
<b>Dermal</b>	Not applicable. LD50 (rat) >2000 mg/kg
<b>Inhalation</b>	Not applicable. LC50 (rat) >6.84 mg/L based on ai
<b>Eye</b>	Not applicable.
<b>Skin</b>	Not applicable.

## Chronic Effects:

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	Not applicable.
<b>Germ Cell Mutagenicity</b>	Not applicable.
<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	Not applicable.
<b>STOT/RE</b>	May cause damage to organs through prolonged or repeated exposure.

**Thiabendazole technical** has been extensively tested on laboratory mammals and in test-tube systems. The liver was identified as the target organ. No evidence of neurotoxic, mutagenic, teratogenic or reproductive effects was obtained. No carcinogenic potential was noticed in rats.

## Section 12. Ecotoxicological Information

Very toxic to aquatic life with long lasting effects.

<b>Product:</b>	
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulation</b>	No data available
<b>Mobility in Soil</b>	Propiconazole has low to medium mobility in soil.
<b>Other adverse effects</b>	Propiconazole is stable in water. Propiconazole is not persistent in soil, DT50 aerobic soil 40-70days (20°C)

### Acute Toxicity - Fish

LC50 = 1.3 mg/litre ,96 hr (Rainbow trout), Very toxic to aquatic organisms

### Acute Toxicity - Daphnia

LC50 = 1.9 mg/litre ,48 hr (daphnia magna)

### Earthworm Toxicity

LC<sup>50</sup> >500mg/litre (14 days)

Do not allow to enter waterways.

## Section 13. Disposal Considerations

### Disposal Method:

Triple rinse container and add rinsate to spray tank. Dispose of cleaned container at your local AGRECOVERY container collection site.



**Precautions or methods to avoid:** Avoid release to the environment.

## Section 14. Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2020



### Road, Rail, Sea and Air Transport

<b>UN No</b>	3082
<b>Class - Primary</b>	9
<b>Packing Group</b>	III
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S (Contains thiabendazole)
<b>Marine Pollutant</b>	Yes
<b>Special Provisions</b>	If the product's individual container is below 5L, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

#### Section 15. Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: HSR000581

<b>HSW (HS) Regulations 2017</b>	<b>Trigger Quantity</b>
Signage Trigger Quantities (Schedule 3)	100L
Emergency Response Plan (Schedule 5)	100L
Secondary Containment (Schedule 5)	100L
Tracking (Schedule 26)	Not required
Certified Handlers	Not required
<b>HSNO Additional Controls (Restrictions of use)</b>	
None known.	
<b>ACVM Act and Regulations</b>	
See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a> for registration Conditions	P8383

## Glossary

Cat	Category
EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

### References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices April 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

### Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

The information herein is given in good faith, but no warranty, express or implied is made.

Please contact the New Zealand distributor, if further information is required.

Issue Date: 6 July 2023      Review Date: 6 July 2028