



MATERIAL SAFETY DATA SHEET

TRS 250

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: TRS 250
Product type: PENETRATING WOOD STABILIZER AND WATER REPELLENT FOR WEATHERED WOOD
Supplier: **TIMBERLIFE (PTY) LTD**
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2. COMPOSITION / INFORMATION ON INGREDIENTS

TRS 250 is a mixture of an organosulphur compound (fungicide), drying oils and waxes in aliphatic and aromatic petroleum solvents.

Chemical nature and use:

TRS 250 is a penetrating, solvent-based formulation that contains drying oils to stabilize wood from the inside out and also light coloured, water repellent wax components to control water ingress. It dries to a virtually colourless, natural matt finish. When exposed to direct sunlight, **TRS 250** degrades on the surface and allow the wood to weather to a natural silver-grey colour over time. However, due to its deep penetrating properties, the wood beneath the surface remains nourished and stabilized to control unsightly checking, splitting and warping. **TRS 250** also contains a fungicidal additive to provide protection against mould growth and fungal discolouration.

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Pesticidal active ingredient:

2 – (thiocyanomethylthio) benzothiazole (Organosulphur compound)6 g a.i./ℓ (min)

Other ingredients:

Blend of drying oils and waxes in aliphatic and aromatic petroleum solvents.

3. HAZARD IDENTIFICATION

Most important hazards:

- Human health effects

Moderately toxic if ingested

May cause moderate irritation to skin

May cause moderate irritation and is harmful to eyes

Irritating and moderately toxic by inhalation.

- Environmental effects

Toxic to both plant and aquatic life

- Physical hazards

Flammable. Thermal decomposition results in release of toxic fumes.

4. FIRST-AID MEASURES

Ingestion:

Seek medical attention immediately. Do not induce vomiting. Drink lots of milk or water to dilute. If vomiting occurs, drink more water. Note: Do not give anything orally to an unconscious person.

Skin contact:

Immediately remove all contaminated clothing and wash with soap and water. If irritation develops and persists, seek medical attention.

Eye contact:

Immediately flush with fresh water for at least 15 minutes. Seek medical attention if irritation develops and persists.

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Inhalation:

Remove patient to fresh air. Administer oxygen and seek medical attention if necessary.

5. FIRE-FIGHTING MEASURES**Extinguishing media:**

Use dry chemical powder, sand, foam or CO₂.

Flammability:

Product is flammable due to oil, wax and solvent content.

Specific Hazards:

May release irritating and toxic gases when exposed to high temperatures. Product may decompose if heated above 60°C.

Protective clothing:

Self contained breathing apparatus. PVC gloves. Cotton or polyester overalls. Safety glasses or goggles.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions:**

Wear gloves, safety glasses or splash-proof goggles and polyester overalls. In confined spaces wear respiratory equipment.

Environmental precautions:

Avoid contamination of rivers, dams or canals.
Prevent spillage from entering drains and ditches.

Methods for cleaning up:

Absorb or dike with inert material such as sand or diatomaceous earth. Then dispose of at a class 1 disposal site.

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7. HANDLING AND STORAGE

Handling:

Avoid contact with eyes and skin.

Avoid inhalation of spray and vapour.

The use of suitable gloves and eye/face protection is recommended.

In case of contact with the skin, immediately wash with soap and water.

Do not eat, drink or smoke while using the product.

Do not discharge into rivers, dams and canals.

Storage:

Keep out of reach of children, uninformed persons, and animals.

Do not store near sources of sparks, flame or heat.

Store in a cool, dry place away from food and foodstuffs.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limit : TLV/TWA : 500 ppm (ACGIH) calculated.

Personal protective equipment:

Wear suitable protective clothing such as overalls, rubber gloves and safety goggles during handling and use of the product.

In confined spaces the use of approved respiratory equipment for protection from mists of pesticides is recommended.

Hygiene measures:

Wash hands with soap and water before eating, drinking or smoking.

Wash overalls and clothes regularly.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	:	Organic liquid
Colour	:	Yellowish transparent
Odour	:	Slightly aromatic
PH	:	Slightly acidic
Temperature stability	:	Stable at temperatures of up to 60°C
Melting point	:	Not available
Decomposition temperature	:	Above 60°C
Flammability	:	Flammable due to oil, wax and solvent content
Explosion properties	:	Not established
Flash point	:	Above 40°C (IP 34)
Density @ 20°C	:	0,81 kg/ℓ
Solubility	:	Aliphatic and aromatic solvents

10. STABILITY AND REACTIVITY

Stability	:	Stable in neutral and slightly acidic media
Conditions to avoid	:	Elevated temperatures
Materials to avoid	:	Strong oxidants, acids and alkalis.
Hazardous decomposition products	:	Toxic fumes of SO _x , CN ⁻ , Cl ⁻ and NO _x may be evolved on combustion.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	:	<ul style="list-style-type: none">• Oral LD₅₀ (rat) - 1200 mg/kg• Dermal LD₅₀ (rabbit) - Over 2000 mg/kg• Inhalation LC₅₀ (rat) - Over 0,17 mg/ℓ/hour
Local effects	:	See Section 3, "Human health effects".
Chronic toxicity	:	No evidence of carcinogenic or mutagenic effects. May cause asthma (inhalation over a long period) or dermatitis (if absorbed by the skin over a long period).

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12. ECOLOGICAL INFORMATION

- Environmental effects** : See Section 3, "Environmental effects".
- Mobility** : Active ingredient remains mobile to very mobile in various soils.
- Degradability** : Biodegradable in water and soil.
- Bioaccumulation** : Due to biodegradation and recommended application rates, it is unlikely that bioaccumulation will attain levels of environmental significance.
- Ecotoxicity** : **Birds:**
Minimally toxic to birds (data for technical material)
Acute oral LD₅₀: > 10000 mg/kg (mallard ducks)
> 2000 mg/kg (chickens)
- Fish:**
Toxic to fish (data for technical material)
LC₅₀ (96 hr) : 0.69 µg/l (rainbow trout)
- Bees:**
Highly toxic to bees (data for technical material)
LD₅₀ (oral) : 0,035 µg/bee
LD₅₀ (topical): 0,02 µg/bee
- Daphnia:**
Very toxic to *Daphnia magna* (data for technical material)
The 48-hour LC₅₀ is 0,15 µg/l

13. DISPOSAL CONSIDERATIONS

- Product waste** : Dispose of in accordance with prevailing disposal regulations. Avoid contamination of soil and water by waste product. Whenever possible, any waste product should be recovered and re-used.
- Packaging material** : Do not re-use containers. Puncture all plastic containers. Flatten all metal containers.

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14. TRANSPORT INFORMATION

UN Number : 2924 (2 – (thiocyanomethylthio) benzothiazole)
ADR / RID : 6.1 Subsidiary Risk 3
IMDG / IMO : 6.1 Subsidiary Risk 3
ICAO / IATA : 6.1 Subsidiary Risk 3

Packaging Group : III
Road/Rail : Pesticide, organic, liquid, toxic, flammable.
Air / IATA : Pesticide, organic, liquid, toxic, flammable.
Sea : Pesticide, organic, liquid, toxic, flammable.
Marine pollutant.

15. REGULATORY INFORMATION

Symbol : X_n, X_i

Indication of danger : Harmful, Irritant.

Risk phrase(s):

R 20/22 : Harmful by inhalation and if swallowed,
R 36/37/38 Irritating to eyes, respiratory system and skin.
R 41 : Risk of serious damage to eyes.
R 43 : May cause sensitisation by skin contact.
R 50 : Very toxic to aquatic organisms.
R 57 : Highly toxic to bees.

Safety phrases:

S 2 : Keep out of reach of children.
S 23 : Do not breathe vapour/spray.
S 24/25 : Avoid contact with skin and eyes.
S 36/37/38 : Wear suitable protective clothing, gloves and eye/face protection.

16. OTHER INFORMATION

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct.

It is the responsibility of persons in receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product.

Compiled: March 2007