
STARPLEX 83 CC

Material Safety Data Sheet

Revised on: 1 June 2014

Revision number 2

1. Substance/preparation and company identification

TIMBERDEFENCE

Use: Public Health, Industrial health, Insecticide

Company:

Starplex 83 CC
Reg. No. 2004/01564/23
P.O. Box 14374
BREDELL 1623
SOUTH AFRICA
TEL: (011) 979-4246/7

Emergency contact numbers

Tygerberg Poison Center: +2721 931 6129
Griffon Poison Information Centre - 082 446 8946

2. Composition/information on ingredients

TIMBERDEFENCE is a mixture of a synthetic pyrethroid (insecticide) and an organosulphur compound (fungicide) in aliphatic and aromatic petroleum solvents.

Chemical nature and use:

TIMBERDEFENCE is a ready-for-use organic solvent-based solution containing specifically blended insecticidal and fungicidal active ingredients that provides a colourless surface treatment for protection of seasoned timber against wood borer and termite attack as well as discolouring fungi and mould growth. **TIMBERDEFENCE** contains a high level of insecticide to provide long term protection and also to control and eradicate wood boring insects in infested timber.

On application, the organic solvent provides a degree of penetration of the active ingredients into the wood structure and ensures rapid drying of the treated surfaces. After drying, any coating/finish can be applied on the treated wood surface.

Pesticidal active ingredient:

Cypermethrin (Synthetic pyrethroid) 10 g.a.i./ℓ (min)

2 – (thiocyanomethylthio) benzothiazole (Organosulphur compound) 8 g.a.i./ℓ (min)

Other ingredients:

Blend of aliphatic and aromatic petroleum solvents.

3. Composition/Information on Ingredients
Mixtures

TIMBERDEFENCE is registered with the South African Department of Agriculture, Forestry and Fisheries in terms of Act No.36 of 1947 as a toxicity group II product (Yellow band), i.e. "Moderately hazardous".

Most important hazards:

- Human health effects
 - Moderately toxic if ingested
 - May cause moderate to severe irritation to skin
 - May cause moderate to severe irritation and is harmful to eyes
 - Irritating and moderately toxic by inhalation.
- Environmental effects
 - Toxic to both plant and aquatic life
- Physical hazards
 - Highly 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 immediately. Continue flushing for another 15 minutes if medical attention does not arrive promptly.

Inhalation:

Remove patient to fresh air. Administer oxygen if necessary. If patient stops breathing administer artificial respiration. Seek medical attention immediately.

5. Fire-fighting measures**Extinguishing media:**

Use dry chemical powder, sand, foam or CO₂.

Flammability:

Product is highly flammable due to 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 cotton or 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.

7. Handling and storage

Handling:

Avoid contact with eyes and skin.

Avoid inhalation of spray and vapour.

Wear suitable gloves.

Wear eye face protection.

After contact with the skin and eyes, 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 and 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.

9. Physical and chemical properties

Physical state	:	Transparent organic liquid
Colour	:	Yellowish-brown
Odour	:	Aromatic
PH	:	Slightly acidic
Temperature stability	:	Stable at temperatures of up to 60°C
Melting point	:	60 - 80°C (Technical material)
Decomposition temperature	:	Above 60°C
Flammability	:	Highly flammable due to solvent content
Explosion properties	:	Not established
Flash point	:	Above 40°C (ASTM D-93)
Density @ 20°C	:	0,88 kg/l
Solubility :		Aromatic solvents

10. Stability and reactivity

Stability	:	Stable in neutral and acidic media
Conditions to avoid	:	Elevated temperatures
Materials to avoid	:	Strong oxidants and alkalis
Hazardous decomposition		
Products	:	Toxic fumes of SO _x , CN ⁻ , Cl ⁻ and NO _x may be evolved on combination if heated above 60°C

11. Toxicological information

Acute toxicity	:	<ul style="list-style-type: none">• Oral LD₅₀ (rat) - Over 2565 mg/kg• Dermal LD₅₀ (rat) - Over 8000 mg/kg• Inhalation LC₅₀ (rat) - Over 2,5 mg/l of air over 4 hours (Technical material)
-----------------------	---	---

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)

12. Ecological information

Environmental effects	:	See Section 3, "Environmental effects"
Mobility	:	Active ingredients have low mobility and strongly absorbs to soil.
Degradability	:	Practically biodegradable but has a bactericidal effect.
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 LD ₅₀ : > 10000 mg/kg (mallard ducks) > 2000 mg/kg (chickens) Fish: Toxic to fish (data for technical material) LC ₅₀ (96 hr) : 0.69 µg/l (rainbow trout) Bees: Highly toxic to bees (data for technical material) LD ₅₀ (oral) : 0,035 µg/bee LD ₅₀ (topical): 0,02 µg/bee Daphnia: Very toxic to <i>Daphnia magna</i> (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.

14. Transport information

UN Number: 2903 (cypermethrin)

2810 (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.
