
STARPLEX 83 CC

Material Safety Data Sheet

Revised on: 1 June 2014

Revision number 2

1. Substance/preparation and company identification

D-FEND

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: +2711 931 6129

2. Composition/information on ingredients

Label elements

According to Directive 67/548/EEC or 1999/45/EC

EEC Directives

Hazard symbol(s)

N Dangerous for the environment.

R-phrase(s)

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S2 Keep out of the reach of children.
S13 Keep away from food, drink and animal feeding stuffs.
S20/21 When using do not eat, drink or smoke.
S29 Do not empty into drains.
S35 This material and its container must be disposed of in a safe way.
S36/37 Wear suitable protective clothing and gloves.
S57 Use appropriate container to avoid environmental contamination.

Hazard determining component(s) for labelling: ALPHA-CYPERMETHRINE

The product contains: ALPHA-CYPERMETHRINE
May cause paraesthesia.

Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC

Possible Hazards:

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
May cause paraesthesia.

Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

Other Hazards (GHS):

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition/Information on Ingredients Mixtures

Chemical nature

suspension concentrate (SC), Biocidal product

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

Alpha-Cypermethrin

Content (W/W): 5.9 %

CAS Number: 67375-30-8

INDEX-Number: 607-422-00-X

Acute tox. 4 (Inhalation - dust)

Acute tox. 3 (oral)

STOT single 3 (irr. to respiratory syst.)

STOT rep. (Nervous system) 2

Eco acute 1

Eco chronic 1

H332, H301, H400, H410, H335

propane-1,2-diol

Content (W/W): < 15 %

CAS Number: 57-55-6

EC-Number: 200-338-0

REACH registration number:

01-2119456809-23

Hazardous ingredients

according to Directive 1999/45/EC

alpha-Cypermethrin

Content (W/W): 5.9 %

CAS Number: 67375-30-8

EC-Number: 257-842-9

Hazard symbol(s): T, N

R-phrases: 20, 25, 37/38, 48/22, 50/53

propane-1,2-diol

Content (W/W): < 15 %

CAS Number: 57-55-6

EC-Number: 200-338-0

REACH registration number: 01-2119456809-23

For the classifications not written out in full in this section, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, the full text is listed in section 16.

4. First-aid measures

General advice:

Avoid contact with the skin, eyes and clothing. Remove contaminated clothing. If difficulties occur: Obtain medical attention. Show container, label and/or safety data sheet to physician.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

After contact with skin, wash immediately with plenty of water and soap. If irritation develops, seek medical attention.

On contact with eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention.

Note to physician:

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

Most important symptoms and effects, both acute and delayed

Symptoms: numbness and tingling of hands and feet, lung oedema, convulsions

Indication of any immediate medical attention and special treatment needed

Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-fighting measures

Suitable extinguishing media:

water spray, water fog, carbon dioxide, foam

Specific hazards:

carbon monoxide, hydrogen chloride, hydrogen fluoride, nitrogen oxides, sulfur oxides, organochloric compounds

The substances/groups of substances mentioned can be released in case of fire.

Special protective equipment:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Personal precautions:

Use personal protective clothing. Avoid contact with the skin, eyes and clothing. Remove contaminated clothes, undergarments and shoes immediately.

Environmental precautions:

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

Cleaning operations should be carried out only while wearing breathing apparatus. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

7. Handling and storage

Handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas.

Protection against fire and explosion:

The product is combustible. Vapours may form ignitable mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Storage

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect against moisture. Protect from direct sunlight.

Storage stability:

Storage duration: 24 Months

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

8. Exposure controls and personal protection

Personal protective equipment

Respiratory protection:

Breathing protection if gases/vapours are formed. Wear respiratory protection if ventilation is inadequate. Gas filter EN141 Type A for gases/vapours of organic compounds (boiling point >65 °C).

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other.

Eye protection:

Tightly fitting safety goggles (splash goggles) (EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to DIN-EN 465).

General safety and hygiene measures:

Take off immediately all contaminated clothing. Store work clothing separately. Keep away from food, drink and animal feeding stuffs. No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift.

9. Physical and chemical properties

Form:	liquid, suspension
Colour:	white
Odour:	Faintly aromatic
pH value:	7 - 8 (water, 1 %(m), 20 °C) (measured with the undiluted substance)
Crystalization temperature:	-5.7°C
Boiling point:	100 °C
Flash point:	No Flashpoint – Measurement made up to boiling point
Ignition temperature:	425 °C
Density:	approx. 1.03 g/cm ³ (20 °C)
Solubility in water:	dispersible

10. Stability and reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: No corrosive effect on metal.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid

See MSDS section 7 - Handling and storage.

Incompatible materials

Substances to avoid:
strong bases, strong acids, strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological information

LD50/oral/rat/male/female: > 5,000 mg/kg

LC50/by inhalation/rat/male/female: > 2.06 mg/l / 4 h

LD50/dermal/rat/male/female: > 2,000 mg/kg

Primary skin irritation/rabbit: Not irritant to skin and eyes.

Primary irritations of the mucous membrane/rabbit: non-irritant

Sensitization/guinea pig: Skin sensitizing effects were not observed in animal studies.

Additional information:

Misuse can be harmful to health.

12. Ecological information

Ecotoxicity

Toxicity to fish:
LC50 (96 h) 0.93 µg/l, *Pimephales promelas*

Aquatic invertebrates:
Daphnia magna/EC50 (48 h): 0.3 µg/l

Aquatic plants:
Scenedesmus subspicatus/EC50 (72 h): 1000 µg/l

Persistence and degradability

Elimination information
Evaluation:

Not readily biodegradable (by OECD criteria).

Bio-accumulative potentialBioconcentration factor: 910, *Cyprinus carpio***Additional information**

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal considerations

Must be dumped or incinerated in accordance with local regulations.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

14. Transport information**Land transport**

ADR :	Class	9
	Packaging group	III
	UN-number	3082
	Designation of goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: FIPRONIL 3%)

RID :	Class	9
	Packaging group	III
	UN-number	3082
	Designation of goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alpha cypermethrin)

Inland waterway transport

ADNR :	Class 9	
	Packaging group	III
	UN-number	3082
	Designation of goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alpha cypermethrin)

Sea transport

IMDG/GGVSee :	Class	9
	Packaging group	III
	UN-number	3082
	Marine pollutant	YES
	Exact technical name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Alpha cypermethrin)

Air transport

ICAO/IATA :	Class	9
	Packaging group	III
	UN-number	3082
	Exact technical name	ENVIRONMENTALLY HAZARDOUS

SUBSTANCE, LIQUID, N.O.S. (contains
Alpha cypermethrin)

15. Regulatory information

Regulations of the European union (Labelling) / National legislation/Regulations

EEC Directives:

Hazard symbol(s)

Xn Harmful.
N Dangerous for the environment.

R-phrases(s)

R38 Irritating to skin.
R40 Limited evidence of a carcinogenic effect.
R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R65 Harmful: may cause lung damage if swallowed.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases(s)

S2 Keep out of the reach of children.
S13 Keep away from food, drink and animal feeding stuffs.
S20/21 When using do not eat, drink or smoke.
S35 This material and its container must be disposed of in a safe way.
S36/37 Wear suitable protective clothing and gloves.
S57 Use appropriate container to avoid environmental contamination.
S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Hazard determinant component(s) for labelling: FIPRONIL, TRIBUTYLPHOSPHATE,
KEROSENE
(PETROLEUM)

16. Other information

Full text of hazard symbols and R-phrases if mentioned as hazardous components in chapter 2:

T Toxic.
N Dangerous for the environment.
Xn Harmful.
Xi Irritant.
23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
48/25 Toxic: danger of serious damage to health by prolonged exposure if swallowed.
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
22 Harmful if swallowed.
38 Irritating to skin.
40 Limited evidence of a carcinogenic effect.
10 Flammable.
36/38 Irritating to eyes and skin.
37/38 Irritating to respiratory system and skin.
41 Risk of serious damage to eyes.

67
65

Vapours may cause drowsiness and dizziness.
Harmful: may cause lung damage if swallowed

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.
