

STARPLEX 83 CC

Revised on: 12/8/2024
Revision number: 5
Next revision: August 2027
Deltakill CS

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Deltakill CS

Use: Public Health / Insecticide

Company Name:

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

Emergency Contact Numbers:

Griffon Poison Information Centre: (+27)82 446 8946
Poison Information Centre: 0861 555 777

2. HAZARD IDENTIFICATION

SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP]		
Hazard classes	Hazard categories	Hazard codes
Acute Toxicity	Category 5	H303
Skin Sensitization	Category 1	H317
Eye Irritation	Category 2	H319
Aquatic Acute	Category 1	H400
Aquatic Chronic	Category 1	H410

Hazard pictogram



Signal word: Warning

Hazard statements:

H303: May be harmful if swallowed.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P264+P265: Wash hands thoroughly after handling. Do not touch eyes.

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P272: Contaminated clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear eye protection, protective gloves and protective clothing.

P301+P317: IF SWALLOWED: Get medical help.

P302+P352: IF ON SKIN: Wash with plenty of water and non-abrasive soap.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P317: If skin irritation or rash occurs: Get medical help.

P337+P317: If eye irritation persists: Get medical help.

P391: Collect spillage.

P501: Dispose of contents/container to suitable landfill in accordance with local regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS:

Substance / Mixture: Mixture

Composition:

CHEMICAL NAME	CAS NO	CONCENTRATION	GHS CLASSIFICATION
Deltamethrin	52918-63-5	2.5%	Acute Toxicity 3 (oral) (H301) Acute Toxicity 3 (inhalation) (H331) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Butylated hydroxytoluene	128-37-0	< 1%	Aquatic Chronic 1 (H410)
Polyoxyethylene laurylether	9002-92-0	> 5%	Acute Toxicity 4 (oral) (H302) Eye Irritation 2 (H319) Aquatic Chronic 3 (H412)

4. FIRST AID MEASURES:

General advice: Avoid contact with skin, eyes and clothing. Remove contaminated clothing. If exposed or concerned: Get medical attention.

Skin contact: Wash with plenty of water and soap. If skin irritation occurs, get medical advice.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice.

Ingestion: Rinse mouth immediately and then drink plenty of water, seek medical attention if necessary. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting unless told to by a Poison Control Centre or doctor.

Inhalation: Keep patient calm, remove to fresh air, and seek medical attention if necessary.

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Note to physician: This product contains a pyrethroid and should not be confused with organophosphate compounds. Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES:

Suitable extinguishing media: Use dry powder or carbon dioxide (CO₂) for small fires and water spray, fog or foam for large fires.

Unsuitable extinguishing media for safety reasons: High volume water jet. Use a water jet only to cool heated containers.

Specific hazards: In the event of fire, gasses such as carbon monoxide, hydrogen fluoride, carbon dioxide and nitrogen oxides may be released.

Special fire-fighting procedures: In case of fire and/or explosion do not breathe fumes. Remain upwind of fire and keep out of low areas. Move containers from fire area if you can do it without risk. Cool containers that are exposed to flames with water until well after the fire is out. Do not use high volume jet, due to contamination risk. Do not scatter the burning material. 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.

Personal protective equipment: Wear NIOSH / MSHA positive pressure self-contained breathing apparatus (SCBA) and full protective gear.

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. Ventilate area of spill or leak especially in confined areas.

Protective equipment: Wear protective gloves and chemical safety goggles. If conditions warrant, wear a positive pressure NIOSH approved self-contained breathing apparatus, or respirator.

Emergency procedures: Evacuate unprotected personnel. Equip clean-up crew with proper personal protection equipment.

Environmental precautions: Avoid release to the environment, especially water sources, due to aquatic toxicity. Do not discharge into drains/surface waters/groundwater.

Methods and Materials for containment: Dike spillage and collect in closed and suitable containers for disposal.

Methods and Materials for clean-up: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Shovel up carefully and place the material in a clean, dry and sealable container. Label container with the contents and dispose of as for toxic waste in accordance with local/national regulations. DO NOT burn. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. Collect wash water and add to the drums already collected. Do not flush spilled material or wash water into drains or waterways.

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7. HANDLING AND STORAGE:

Handling:

Precautions for safe handling: No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas.

General occupational hygiene: Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used.

Storage:

Conditions for safe storage: Keep under lock and key and out of reach of unauthorised persons, children and animals. Store in its original, labelled container, tightly closed in a dry, cool and well-ventilated area. Do not store near heat, open flame, sources of ignition or hot surfaces. Not to be stored next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilizers.

Incompatible substances and mixtures: None known. Protect against moisture. Protect from direct sunlight.

Packaging material: HDPE plastic containers.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION:

Permissible concentration: No occupational exposure limits have been determined for the significant ingredients in this product.

Engineering controls: It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of the exposure. Provide general or local exhaust ventilation systems. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations.

Personal protective equipment:

Respiratory protection: If used in poorly ventilated areas (airborne concentrations exceed exposure limits), use a NIOSH approved, positive pressure self-contained breathing apparatus (SCBA).

Skin and body protection: Use protective gloves, coveralls and rubber boots to prevent repeated or prolonged skin contact with the product.

Eye protection: The use of chemical safety goggles is recommended to protect against eye contact. Contact lenses are not protective eye devices.

Emergency eyewash: Have an eye wash fountain readily available in the immediate work area for emergency use.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance:	Opaque white viscous liquid.
Odour:	Light chemical odour.
Odour threshold:	Not known.
pH:	5 - 7
Melting point:	Not available.

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Freezing point:	Not available.
Boiling point:	Not available.
Flashpoint:	100 °C.
Flammability:	Not flammable.
Upper / lower explosion limits:	Not available.
Vapour pressure:	Not established.
Relative vapour density:	Not available.
Density / relative density:	1.028 g/ml
Solubility:	Soluble in water.
n-octanol / water partition coefficient:	Not applicable
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Not applicable.

10. STABILITY AND REACTIVITY:

Chemical stability: The product is stable for two years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 30 °C and not for prolonged periods in direct sunlight.

Reactivity: None known.

Possible hazardous reactions: None known.

Conditions to avoid: Keep away from heat and flames.

Incompatible materials: None known.

Hazardous decomposition products: In the event of fire gasses such as carbon monoxide, hydrogen fluoride, carbon dioxide and nitrogen oxides may be released.

11. TOXICOLOGICAL INFORMATION:

ACUTE TOXICITY

Calculated according to GHS:

Oral LD₅₀: 3770 mg/kg (rat)

Dermal LD₅₀: 13422 mg/kg (rabbit)

Inhalation LC₅₀: 5 mg/l/4 hr (rat)

Skin irritation / corrosion: Not calculated.

Eye damage / irritation: Not calculated.

Skin sensitization: Not calculated.

Respiratory sensitization: Not calculated.

Germ cell mutagenicity: Not calculated.

Carcinogenicity: Not calculated.

Reproductive toxicity: Not calculated.

Specific target organ toxicity – single exposure: Not calculated.

Specific target organ toxicity – repeat exposure: Not calculated.

Aspiration toxicity: Not calculated.

Chronic effects: Not available.

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POTENTIAL ADVERSE EFFECTS:

Ingestion: May be harmful if swallowed.

Other information: None known.

12. ECOLOGICAL INFORMATION:

ECOTOXICITY DATA:

For active ingredient – Deltamethrin:

Fish

LC ₅₀ (96 h)	Rainbow trout	0.91 µg/ℓ
	Bluegill sunfish	1.4 µg/ℓ

Daphnia

LC ₅₀ (48 h)		3.5 µg/ℓ
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Algae

EC ₅₀ (96 h)	<i>S. capricornutum</i>	> 9.1 mg/ℓ
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Birds

LD ₅₀	Bobwhite quail	> 2250mg/ℓ
	Mallard duck	> 4640mg/ℓ

Bees

Toxic to bees.

LD ₅₀ (oral)		79 ng/bee
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LD ₅₀ (contact)		51 ng/bee
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Worms

LC ₅₀ (14 d)	Earthworms	> 1290 mg/kg soil
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ENVIRONMENTAL EFFECTS:

Based on information for the active ingredient:

Plants: Deltamethrin is a non-systemic compound, thus no uptake through the leaves and roots. There are no major metabolites, except in oily crops, where *trans*-deltamethrin is part of the residue definition.

Persistence and degradability: Deltamethrin undergoes microbial degradation in soils within 1 – 2 weeks.

Bio-accumulative potential: Deltamethrin does not bio-accumulate.

Mobility in soil: A K_{oc} $4.6 \times 10^5 - 1.6 \times 10^7$ cm³/g range confirms strong absorption by soil colloids and no risk of leaching.

Other adverse effects: No incidence on soil microflora and the nitrogen cycle.

13. DISPOSAL CONSIDERATIONS:

Waste: Open dumping, burying or burning of this product is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Do not contaminate rivers, dams or any other water sources with the product or used containers. Place in labelled containers and dispose of in accordance with local legal requirements.

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Container: Empty plastic containers contain traces of active ingredients. It is thus categorized as hazardous waste. Triple rinse the empty container as follows: Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture triple rinsed container and dispose of via an approved collector or recycler (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages. Disposal of empty containers should be in accordance with local legal requirements.

14. TRANSPORT INFORMATION:

UN Number: 3082

Road Transport ADR / ORD:

Class: 9

Packaging group: III

UN Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s (Deltamethrin 25 g/l CS)

Maritime Transport IMDG / IMO:

Class: 9

Packaging group: III

UN Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s (Deltamethrin 25 g/l CS)

Marine pollutant: Yes

Air Transport IATA / ICAO:

Class: 9

Packaging group: III

UN Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s (Deltamethrin 25 g/l CS)

Special / Environmental Precautions: Wedge drums tightly to avoid movement.

Transport in bulk: Refer to MARPOL 73/78, Annex II and the IBC code.

15. REGULATORY INFORMATION:

Safety, health and environmental regulations / legislation for the mixture: OSHA 2021 Regulations for Hazardous Chemical Substances.

Relevant information regarding the restrictions: None.

EU Regulation: Regulation EC1272/2008 (EU-GHS/CLP).

Other national regulations: None.

Chemical Safety Assessment carried out? No.

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16. OTHER INFORMATION:

Packaging: Packed in 1 ℓ high density polyethylene plastic drums labelled according to South African regulations and guidelines.

Other hazard statements, abbreviations and explanations:

H301: Toxic if swallowed.

H302: Harmful if swallowed.

H319: Causes serious eye irritation.

H331: Toxic if inhaled.

H412: Harmful to aquatic life with long lasting effects.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

IATA: International Air Transport Association.

IBC: International Bulk Chemical.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Dangerous Goods.

IMO: International Maritime Organization.

LD₅₀ value: The median lethal dose or the amount of a toxic agent that is sufficient to kill 50 percent of a population within a certain period of time.

OEL/RL: Occupational exposure limit-recommended limit.

PEL: Permissible exposure limits.

TWA: Time-weighted average – the average exposure over a specified period, usually a nominal eight hours.

ST/STEL: Short-term exposure limits.

STOT: Single target organ toxicity.

Disclaimer:

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 information on this sheet is not a specification; it does not guarantee specific properties. 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. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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