Revised on: 4/1/2021
Revision number 2

STARPLEX 83 CC

Material Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE / MISTURE AND OF THE COMPANY

1.1 Product Name:
PCO Flushing Agent

1.2 Use: Public Health / Industrial

1.3 Company Name:

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

1.4 Emergency Contact Numbers:
Tygerberg Poison Centre: +2721 931 6129
Griffon Poison Information Centre - 082 446 8946

2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture
Classification of the substance or mixture
OSHA HCS 2012 Aspiration 1
Flammable Liquids 4
Skin Irritation 2
Skin Sensitization 1
Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
Serious Eye Damage 1

Label elements

Signal word DANGER
Symbols: Xn, N
Risk Phrases:
R20/21/22
R50/53

3. COMPOSISTION INFORMATION ON INGREDIENTS:

CAS NO	HAZARDOUS COMPONENT	CONCENTRATION	GHS CLASSIFICATION
8003-34-7	Pyrethrins	0.4 %	H302 (96.86%): Harmful if swallowed [Warning Acute toxicity, oral]

			H312 (96.86%): Harmful in contact with skin [Warning Acute toxicity, dermal] H332 (99.37%): Harmful if inhaled [Warning Acute toxicity, inhalation] H400 (97.48%): Very toxic to aquatic life [Warning Hazardous to the aquatic environment, acute hazard] H410 (96.23%): Very toxic to aquatic life with long lasting effects [Warning Hazardous to the aquatic environment, long-term hazard
8008-20-6	Kerosene	>16 %	Flam. Liquid Category 3 H226 Skin Corrosion/Irritation Category 2 H315 Aspiration Hazard Category 1 H304 STOT SE Category 3 H336 Aquatic Chronic Category 2 H411
74-98-6	Hydrocarbon propellant	>80 %	H220: Extremely flammable gas [Danger Flammable gases]

4. FIRST AID MEASURES:

Inhalation: Remove patient from source of poisoning to well ventilated area and keep him quiet and reassured. If not breathing administer artificial respiration (to be administered by trained personnel), if breathing is difficult give oxygen. DO NOT apply direct mouth to mouth respiration, use a disposable protective mouthpiece.

Skin contact: Remove contaminated clothing, rinse the affected skin area with plenty of soap and cool water or shower, continue to wash for 10 minutes. Obtain medical attention if excessively exposed to propellant and redness and blistering occurs and persists. Wash contaminated clothing before re-use.

Eye contact: Immediately wash eyes with copious amounts of clean water for at least 15 minutes, cover with a sterile dressing, get medical attention.

Ingestion: Keep patient calm and reassured, rinse mouth with water. Never give anything by mouth to an unconscious person. DO NOT apply direct mouth to mouth respiration, use a disposable protective mouthpiece.

SEEK MEDICAL ADVICE PROMPTLY AND SHOW THIS MSDS TO A MEDICAL PRACTITIONER

Note to physician: No specific antidote known. Symptomatic and supportive treatment as indicated.

5. FIRE FIGHTING MEASURES:

Fire hazards: Flammable gas under pressure.
Flash point of solvent: 65 to 70 °C (Closed cup - PMCC)
Flash point of propellant: About -60 °C (Closed cup)
Explosion hazards: Violent rupture of containers involved in a fire, possible. Vapours of propellant are heavier than air, may travel along the ground and be ignited at remote locations and flash back.

The PROPELLANT IS EXPLOSIVE; EXPLOSIVE LIMITS: 1,9 to 8,5 % in air.

Auto-ignition temperature of propellant: 405 °C
Decomposition products in a fire: The active ingredient decomposes in a fire to emit acrid smoke and irritating fumes; the propellant decomposes in a fire to emit carbon monoxide and carbon dioxide.
Fire extinguisher agents to be used: Dry powder; CO2.
Protection for fire fighters: Chemical impermeable gloves, face shield, effective respiratory protection or self contained breathing apparatus as dictated by circumstances, full length protective clothing, apron and boots.

Fire: Self-contained breathing apparatus as irritating fumes may be given off.

Specific methods: Water fog to be used to keep undamaged containers cool in a fire.
Eye contact with the liquid propellant may cause frostbite and severe corneal damage. High airborne concentrations of propellant may cause irritation to eyes and skin.
Skin contact with the liquid propellant may cause frostbite and irritation. The propellant reacts vigorously with oxidizing agents. No unprotected person should be allowed in the vicinity. Evacuation of area may be necessary in a fire. Water spray may be used to disperse accumulating vapour of punctured cans. Contain liquid run-off with temporary earth barriers. The material is toxic to fish, bees and other useful insects.

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions: Wear suitable protective clothing. Eliminate all ignition sources. Report incident to emergency personnel if aerosol cans are damaged.

Environmental precautions: Prevent contamination of vegetation, sewers, waterways or low areas, drinking water and/or crops and grazing.

Methods for cleaning up: Extinguish all flames. Dike spill. Absorb liquid with sand or other non-flammable absorbent material. Shovel up carefully and dispose of as for flammable and toxic waste in accordance with local/national regulations.

Prevention of secondary hazards: No smoking or naked flames. Inspect for damaged aerosol cans.

Protective clothing: Chemical impermeable gloves, face shield, effective respiratory protection or self-contained breathing apparatus as dictated by circumstances, full length protective clothing, apron and boots.

7. HANDLING AND STORAGE:

Handling: Use only as per directions on label. Pressurised container; protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn container, even after use. FLAMMABLE - do not spray near a naked flame. Prevent contamination of food, feedstuffs, eating utensils and drinking water. Remove pets and cover aquaria. Prevent excessive wetting of plastics and highly polished surfaces. Wash with soap and water after use. Avoid excessive inhalation and skin contact.

Technical measures: Ensure adequate ventilation. Eliminate any source of ignition.

Prevention of worker exposure: Local and general ventilation, prevention of uncontrolled aerosol generation.

Environmental precautions:

PRECAUTIONS: During application and when cleaning protective clothing, contamination of all sources of drinking water, rivers, dams, crops or grazing shall be prevented.

HAZARDS: Violent eruption of aerosol can if exposed to temperatures above 50 °C. Prevent damage to aerosol can, do not puncture. The product is toxic to fish, bees and other useful insects.

Cleaning of equipment after use:

All protective clothing and respirators used shall be decontaminated, washed, rinsed and dried.

Storage:

Suitable storage conditions:

Store under lock and key and out of reach of children and domestic animals.
Store in a cool, dry place away from sources of heat and naked flames.

Precautions: Store away from foodstuffs, eating utensils and drinking water. Do not expose aerosol container to temperatures exceeding 50 °C.

Packaging materials: Recommended packaging: Aerosol can with crack and crevice nozzle. For liquid spillage: Metal drum.

Unsuitable packaging: Plastic containers.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION:

Exposure Controls - Engineering:	Effective ventilation to be maintained at all times. Do not expose aerosol container to temperatures above 50 °C.
Personal protection:	
Application:	Adequate ventilation. Wash exposed skin area, face and hands after use.
Manufacture of concentrate:	Chemical impermeable gloves, barrier cream on exposed skin, goggles if necessary, respiratory protection, full length overalls and boots.
Emergency:	Chemical impermeable gloves, face shield, effective respiratory protection or self-contained breathing apparatus as dictated by circumstances, full length protective clothing and boots.
Specific hygiene measures:	Avoid skin contact

9. PHYSICAL AND CHEMICAL PROPERTIES:

Description:	A clear, yellow concentrate liquid contained under pressure in an aerosol can.
Flash point for solvent:	65 to 70 °C (Closed cup)
Flash point for propellant:	About - 60 °C (Closed cup)
Solubility:	Pyrethrins are relatively insoluble in water; miscible with most organic solvents.

10. STABILITY AND REACTIVITY:

Stability:	The product is stable in original container in normal temperatures and conditions.
Compatibility:	The pyrethroid is incompatible with alkaline substances. Hydrolysis and loss of insecticidal activity.
Decomposition:	For pyrethrins in light and air, oxidation and loss of insecticidal activity occurs.
Fire:	The active ingredient decomposes in a fire to emit acrid smoke and irritating fumes.

11. TOXICOLOGICAL INFORMATION:

11.1 Toxicological information Pyrethrins:

The product may be hazardous on inhalation, skin contact and ingestion.

Acute Oral LD50:	2370 mg/kg
Acute Dermal LD50:	1500 mg/kg
Acute Inhalation LC50:	3.4 mg/l air

Pyrethrins may cause dermatitis in sensitized individuals. Persons sensitive to pollen are prone to allergic reactions which include respiratory discomfort.

11.2 Toxicological information Kerosene:

Acute Oral LD50: >5000 mg/kg
Acute Dermal LD50: >2000 mg/kg
Acute Inhalation LC50: >5.28 mg/l air

11.3 Toxicological information Hydrocarbon propellant :

Acute Oral LD50: 4820 mg/kg
Acute Dermal LD50: 2000 mg/kg
Acute Inhalation LC50: 5.04 mg/l air

11.4 Toxicological information Formulated product :

Acute Oral LD50: 491 007 mg/kg
Acute Dermal LD50: 202 976 mg/kg
Acute Inhalation LC50: 515,470 mg/l air

12. ECOLOGOCAL INFORMATION:

12.1 Toxicity to fish:

For pyrethrins the LC50 (96 hours) (static tests) for coho salmon is 39 mg/l and for channel catfish is 114 mg/l.

12.2 Toxicity to bees:

For honeybees the oral LD50 is 150 ng/bee and for contact is 130 to 290 ng/bee. Pyrethrins exhibit a repellent effect to bees.

12.3 Persistence/Degradation:

For pyrethrins in the environment, degradation, promoted by sunlight and UV light, begins at the alcohol group and involves the formation of numerous unknown cleavage products.

13. DISPOSAL CONSIDERATIONS:

Accidental spillages: If aerosol cans have been punctured, extinguish all source of ignition. Consider evacuation of unnecessary people. Contain liquid spillage with sand or earth; disperse vapour cloud with water spray. Cover drains, sewers, etc. and inform authorities if major spillage occurs. Sweep up and dispose of contained spillage after all danger of fire has been eliminated and dispose of as for flammable and toxic waste in accordance with local/national regulations. Protective clothing to be worn when clearing spillage.

Waste from residues: Liquid residue to be disposed of as for flammable and toxic waste in accordance with local/national regulations.

Disposal of used packaging material:

Dispose of empty containers as flammable and toxic waste in accordance with local/national regulations. DO NOT burn. DO NOT puncture containers.

14. TRANSPORT INFORMATION:

UN Number: 1950

Class: 2.1

Packing group: III

Proper Shipping Name: Aerosols, Flammable

IMDG: 2013

Ems: 2-13

MFAG: 620

Subsidiary risk: -

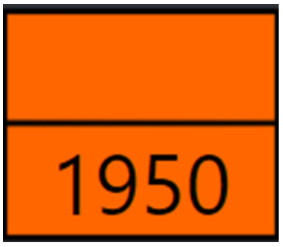
Declaration for land shipment: 1950 AEROSOLS, flammable

Declaration for sea shipment: 1950 AEROSOLS, flammable

Declaration for shipment by air: 1950 AEROSOLS, flammable

Labels:

Hazard Identification Number:



15. REGULATORY INFORMATION:

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

15.2. Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

16. OTHER INFORMATION:

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.