UNIVERSAL STETSON 310 SL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **STETSON 310 SL**
Other identifier: **Oxamyl 310 SL**
Recommended use: Nematicide / Insecticide
Restrictions on use: Agriculture

Company: **Universal Crop Protection (Pty) Ltd.**
Co. Reg. No.: 1983/008184/07
PO Box 801,
Kempton Park, 1620, South Africa
Telephone: (011) 396 2233
Fax: (011) 396 4666
Website: www.villacrop.co.za

Emergency telephone numbers:
24 Hr Transport / Spill emergency no:
Envirosure. +27 31 205 4918
(Hazcall24) +27 86 044 4411
(Client: Villa Crop Protection)
Griffon Poison Information Centre +27 82 446 8946
(Client: Villa Crop Protection)
Poisoning Emergency telephone numbers:
Griffon Poison Information Centre +27 82 446 8946
Poisons Information Centre +27 861 555 777
Villa Crop Protection Emergency number:
National Safety, Health and Environmental Manager:
+27 63 698 0668

2. HAZARDS IDENTIFICATION

UN GHS, Regulation EC 1272/2008 [EU-GHS/CLP] EU & SANS 10234:2008

Hazard classes	Hazard categories	H-statements
Physical		
Flammable liquids	Flam. Liq. 2	H225
Health		
Oral	Acute Tox. 2	H300
Dermal	Skin Irrit. 3	H316
Eye	Eye Dam. 1	H318
Inhalation	Acute Tox 2	H330
Specific Target Organ Toxicity Single Exposure	STOT SE 1	H370
Environment		
Aquatic chronic	Aquatic chronic 2	H411

The most important adverse effects:
Physiochemical effects:
Highly flammable liquid and vapour.
Human health effects:
Causes serious eye damage and damage to organs.
Label elements:

Signal word: Danger.
Hazard statements:
H225: Highly flammable liquid and vapour.
H300: Fatal if swallowed.
H316: Causes mild skin irritation.
H318: Causes serious eye damage.
H330: Fatal if inhaled.
H370: Causes damage to organs.
H411: Toxic to aquatic life with long lasting effects.
Precautionary statements:
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition surfaces. No smoking.
P260: Do not breathe mist/spray.
P264: Wash hands and face thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P273: Avoid release to the environment.
P280: Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
P284: In case of inadequate ventilation wear respiratory protection.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305/351/338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P311: IF exposed or concerned: Call a POISON CENTER.
P310: Immediately call a POISON CENTER.
P330: Rinse mouth.
P370+P378: In case of fire: Use … to extinguish.
P391: Collect spillage.
P403: Store in a well-ventilated place.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.
P501: Dispose of content/container to suitable landfill in accordance with local regulations.
Special labelling of certain mixtures:
None known.

Other hazards:
None known.

Toxicity:
Classification according to GHS: Category 2.
Classification according to WHO: Category 1b.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture.

Composition:

Chemical Name	CAS	Conc. (m/v %)	Classification EC 1272/2008
Oxamyl 95% TC	23135-22-0	31 %	Acute Tox. 2 (H300) Acute Tox. 4 (H312) Acute Tox. 2 (H330) Aquatic Chronic 2 (H411)
Spreader	68131-39-5	< 10 %	Aquatic Acute 1 (H400) Eye damage 1 (H318) Skin Irrit. 2 (H315)
Solvent	67-56-1	< 50 %	Flam. Liq. 2 (H225) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) STOT SE 1 (H370)

4. FIRST AID MEASURES

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure. Immediately consult a doctor.
Inhalation: If vapours or mists have been inhaled, move victim to fresh air and remove source of contamination if safe to do so. The patient should be kept under observation. **Seek medical attention immediately.**
Skin: Remove contaminated clothing, shoes and leather goods. Wash skin gently and thoroughly with cold water and non-abrasive soap. Obtain medical attention if irritation persists.
Eyes: Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. **Seek medical attention immediately.**
Ingestion: Do not induce vomiting. Do not give anything by mouth to an unconscious person. **Obtain medical attention immediately.** If the person is alert, rinse mouth thoroughly with water and have patient take Ipecac followed by activated charcoal or water if instructed to do so by a physician or poison control centre.
Anticipated acute effects: Fatal if swallowed or inhaled. Causes serious eye damage and mild skin irritation.
Anticipated delayed effects: Causes damage to organs.
Most important symptoms/effects: Muscle twitching, and difficulty breathing, headaches, sweating, nausea, weakness, blurred vision, constriction of pupils amongst other symptoms.
Advice to physician: Poisoning is associated with anticholinesterase activity since this product is a cholinesterase inhibitor. Atropine sulphate should be administered intramuscularly or intravenously, 0.4 to 2.0 mg every 15 minutes, until atropinisation is achieved (dry mouth, skin and tachycardia). Continue treatment for 2 - 12 hours depending on severity. Contra-indications include morphine, 2-PAM and oxime therapy.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Extinguish fires with water spray or fog, carbon dioxide, dry powder, or alcohol-resistant foam.
Unsuitable Extinguishing Media: Water jet.
Specific hazards: This product may emit toxic/irritating fumes when burned or vapours that can be ignited. Hazardous decomposition products may include nitrogen oxides, carbon oxides and hydrochloric acid.
Special Fire Fighting Procedures: Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Keep upwind. Avoid inhaling hazardous vapours and fumes from burning materials. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Do not scatter the burning material. Water can be used to cool unaffected containers but must be contained for later disposal. Contain fire control agents for later disposal. Avoid pollution of waterways by run-off from the site.
Personal protective equipment: Wear NIOSH/MSHA approved self-contained breathing apparatus and full bunker gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with eyes and skin. Do not breathe in spray or fumes. Ventilate area of spill or

leak, especially in contained areas. Wear NIOSH/MSHA approved self-contained breathing apparatus
Protective equipment: Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.
Emergency procedures: Alert firefighting personnel, evacuate unprotected personnel and animals.
Environmental Precautions: Prevent spilled product from entering sewers, waterways or ground water. This product is classified as toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. Any spillages or uncontrolled discharges into watercourses should be reported immediately to the police and the Department of Water/Environmental Affairs.
Methods and Materials for Containment: Contain spilled product by diking area with sand, earth or silica gel.
Methods and Materials for Clean-up: Cover contained spill with an inert absorbent material such as sand, earth or other appropriate non-combustible material. Vacuum, scoop, or sweep up material and place the material into a clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spilled material. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent (i.e. organic solvent, detergent bleach or caustic). Add the solution to the drums already collected. Open burning or dumping of this material is prohibited. See section 13 for disposal considerations.

7. HANDLING AND STORAGE

Handling:
Precautions for safe handling: Fatal if swallowed. Fatal if inhaled. Avoid contact with eyes and skin. Ensure adequate ventilation during handling and use. Do not handle broken containers without protective equipment. Immediately clean up spills that occur during handling. Keep containers tightly closed when not in use. In the case of contact with the product refer to First Aid Measures – Section 4.
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 an isolated, dry, cool and well- ventilated area. Avoid heat, hot surfaces, sparks, open flames and other ignition surfaces. Avoid cross contamination with other pesticides and fertilisers.
Incompatible substances and mixtures: Refer to product label.
Packaging material: Plastic containers.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentration

Components	Exposure limits	Type of exposure limit	Source
Solvent	200 ppm	TWA (8 hours)	OSHA PEL

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 exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.
Personal Protective Equipment:
Respiratory Protection: Wear an organic cartridge respirator suitable for protection from mists/ vapours of pesticides if inhalation is likely to occur.
Hand Protection: Employee must wear appropriate chemically resistant gloves e.g. nitrile rubber gloves to prevent contact with this mixture.
Eye Protection: Wear a face shield when handling the concentrate and when applying the product. The use of safety goggles is recommended if a face shield is not used.
Skin and Body Protection: The use of protective (impervious) clothing e.g. coveralls is recommended to prevent skin contact with this mixture.
Emergency eyewash: Where there is any possibility that an employee's eyes may be exposed to this mixture; the employer should provide an eyewash fountain or appropriate alternative within the immediate work area for emergency use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colourless – yellow.
Odour: Alcoholic.
pH (1% aqueous dilution): 6.5.
Melting point: Not available.
Freezing Point: Not available.
Boiling Point: Not available.
Flash Point: 12 °C.

Flammability: Highly flammable liquid and vapour.
Upper/lower explosion limits: Not available.
Vapour Pressure (mm Hg): Not available.
Relative Vapour Density: Not available.
Density: 0.862 g/ℓ
Solubility: Soluble in water.
n-octanol/water partition coefficient: Not available.
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.
Viscosity: Not available.

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 50 °C, preferably below 30 °C, and not for prolonged periods in direct sunlight.
Reactivity: None known.
Possibility of Hazardous Reactions: None known.
Conditions to Avoid: Heating can release vapours that can be ignited.
Incompatible Materials: Incompatible with oxidizing agents.
Hazardous Decomposition Products: Carbon oxides, nitrogen oxides and hydrochloric acid. Vapours may form explosive mixture with air.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:
Calculated according to GHS.
Oral LD_{50} (24 h) rat 8,05 mg/kg.
Dermal LD_{50} (24 h) rabbit > 5000 mg/kg.
Inhalation LC_{50} (4 h) rat 0,18 mg/ℓ
Skin Irritation/Corrosion: Causes mild skin irritation.
Eye Damage/Irritation: Causes serious eye damage.
Skin Sensitization: Not available.
Respiratory Sensitization: Not available.
Reproductive cell mutagenicity: Not available.
Carcinogenicity: Not available.
Reproductive toxicity: Not available.
Specific target organ toxicity – single exposure: Causes damage to organs.
Specific target organ toxicity – repeated exposure: Not available.
Aspiration hazard: Not available.
Chronic Effects: Not available.
POTENTIAL ADVERSE EFFECTS:
Inhalation: Can be fatal if inhaled.
Skin contact: Not available.
Eye contact: Not available.
Ingestion: Can be fatal if swallowed or ingested.

12. ECOLOGICAL INFORMATION

This product is toxic to aquatic life with long lasting effects.
ECOTOXICITY DATA:

Fish:		
LC_{50} (96 h)	Bluegill sunfish	5.6 mg/ℓ
	Rainbow trout	4.2 mg/ℓ
Daphnia:		
LC_{50} (48 h)		0.319 mg/ℓ
Algae:		
EC_{50} (72 h)		3.3 mg/ℓ
Birds:		
Acute oral LD_{50}	Male mallard ducks	3.83 mg/kg
	Female mallard ducks	3.16 mg/kg
	Northern bobwhite quail	9.5 mg/kg
Dietary LC_{50} (8 d)	Bobwhite quail	340 ppm
	Mallard ducks	766 ppm
Bees: Toxic to bees;		
LD_{50} (48 h, oral)		0.38 µg/bee
(48 h, contact)		0.47 µg/bee
Worms:		
LC_{50} (14 d)		112 ppm

Plants:
In plants, oxamyl hydrolyses to the corresponding oximino compound, which, in turn, conjugates with glucose. Total breakdown into natural products has been demonstrated (J. Harvey *et al., J. Agric. Food Chem.*, 1978, 26, 529–536).
ENVIRONMENTAL EFFECTS:
Persistence and degradability: Degraded rapidly in soil, DT_{50} *c.* 7 d. DT_{50} in groundwater (lab. study) 20 d (anaerobic), 20–400 d (aerobic) (J. H. Smelt *et al., Pestic. Sci.*, 1983, **14**, 173–181). K_{oc} 25.
Bio-accumulative Potential: Not determined.
Mobility in soil: Not determined.
Other adverse effects: Not determined.

13. DISPOSAL CONSIDERATIONS

Waste: Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. The product may be taken to a registered waste disposal site or incineration plant. Where possible, recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.
Container: Emptied containers retain vapour and product residues. Do not re-use the empty container for any other purpose. Triple rinse empty containers by inverting the empty container over the spray or mixing tank and allow

draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the container three times with a volume of water equal to a minimum of one third of that of the container. Add the rinsing's to the contents of the spray tank before recycling or destroying the container in the prescribed manner. Destroy the container by perforating and flattening and dispose of through an approved waste dump site, incineration plant or recycling company. Observe all labelled safeguards until container is destroyed.

14. TRANSPORT INFORMATION

UN Number: 2991
Road Transport ADR/IRD:
Class: 3.2
Packaging group: I
UN Proper Shipping Name: Pesticide, Liquid, Toxic, N.O.S. (**flammable,** carbamate, **Oxamyl** 310 g/ℓ)
Maritime Transport IMDG/IMO:
Class: 3.2
Packaging group: I
UN Proper Shipping Name: Pesticide, Liquid, Toxic, N.O.S. (**flammable,** carbamate, **Oxamyl** 310 g/ℓ)
Marine Pollutant (Y/N): Yes
Air transport IATA/ICAO:
Class: 3.2
Packaging group: I
UN Proper Shipping Name: Pesticide, Liquid, Toxic, N.O.S. (**flammable,** carbamate, **Oxamyl** 310 g/ℓ)
Special/Environmental Precautions: None known.
Transport in bulk (according to MARPOL 73/78, Annex II and the IBC code): Not available.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:
OHSA 1993 Regulations for Hazardous Chemical Substances.

Relevant information regarding restrictions: None.

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

Other national regulations: None.

Chemical Safety Assessment carried out? No

16. OTHER INFORMATION

Packaging: Packed in 5, 10, 20 and 25 litres plastic containers, labelled according to South African regulations and guidelines.

Additional H-statement (s) (formulants)
H301: Toxic if swallowed.
H311: Toxic in contact with skin.
H312: Harmful in contact with skin.
H315: Causes skin irritation.
H331: Toxic if inhaled.
H400: Very toxic to aquatic life.
Disclaimer: The information on this sheet is not a specification; it does not guarantee specific properties.
The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed. 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.

END OF DOCUMENT

Compiled: July 2017
Reviewed: June 2019
Revision no.: (2)
Next revision: June 2024

For detailed information on revisions, contact the Registration holder.