

# UNIVERSAL SUCCESSION 225 EC

# SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** SUCCESSION  
**Other identifier:** Clethodim/Haloxyfop-P-methyl  
**Recommended use:** Herbicide  
**Restrictions on use:** Agriculture

**Supplier:** 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](http://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
<b>Physical</b>		
Flammable	Flammable liquid 4	H227
<b>Health</b>		
Eye	Eye irritation 2/2A	H319
Inhalation	Acute tox 4 inhalation	H332
Other	STOT SE 3	H335
	STOT RE 2	H373
	Aspiration tox 1	H304
	Reproduction 2	H316d
<b>Environment</b>		
Aquatic acute	Aquatic acute 2	H401
Aquatic chronic	Aquatic chronic 2	H411

**The most important adverse effects:**  
**Physiochemical effects:**  
 Combustible liquid  
**Human health effects:**  
 May be fatal if swallowed and enters airways.

Causes serious eye irritation.  
 May cause respiratory irritation.  
 Suspected of damaging the unborn child.

### Label elements:



**Signal word:** Danger

### Hazard statements:

H227: Combustible liquid.  
 H304: May be fatal if swallowed and enters airways.  
 H319: Causes serious eye irritation.  
 H335: May cause respiratory irritation.  
 H361d: Suspected of damaging the unborn child.  
 H373: May cause damage to organs through repeated exposure.  
 H401: Toxic to aquatic life.  
 H411: Toxic to aquatic life with long lasting effects.

### Precautionary statements:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P260: Do not breathe mist, vapours and spray.  
 P261: Avoid breathing mist, vapours and spray.  
 P264: Wash hands and face thoroughly after handling.  
 P273: Avoid release to the environment.  
 P280: Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.  
 P301/310: IF SWALLOWED: Immediately call a POISON CENTER.  
 P305/351/338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P331: Do NOT induce vomiting.  
 P337/313: If eye irritation persists: Get medical advice.  
 P362/364: Take off contaminated clothing and wash it before reuse.  
 P391: Collect spillage.  
 P405: Store locked up.  
 P403/233: Store in a well-ventilated place. Keep container tightly closed.  
 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:

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Classification according to GHS: Category 5  
 Classification according to WHO: Category II

**Advice to physician:** Treat symptomatically and supportively. No specific antidote known. Do not aspirate, formulation contains a solvent.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Substance/Mixture:** Mixture

**Composition:**

Chemical Name	CAS	Conc. (m/v %)	Classification EC 1272/2008
Clethodim	99129-21-2	15%	Acute Tox. 4 (H302) Aquatic chronic 2 (H411)
Haloxyfop -P-methyl	72619-32-0	5%	Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic chronic 2 (H410)
Calcium dodecylbenzenesulphonate	26264-06-2	< 10%	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic chronic 4 (H413)
Toulene	121-44-8	50 - 70%	Flam Liq. 2 (H225) Asp. Tox. 1 (H304) AcuteTox.4 (H302) Skin Irrit. 2 (H315) STOT SE 3 (H335) Repr.2. (H361d) STOT RE 2 (H373)

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:** Use carbon dioxide or dry chemical for small fires and water fog or foam for large fires.

**Unsuitable Extinguishing Media:** Water jet. Use a water jet only to cool heated containers. Water may be ineffective in controlling fire.

**Specific hazards:** Not available.

**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.

### 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:** Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs.

**Skin:** Remove contaminated clothing and leather goods, and wash before re-using. Flush skin with water and then wash with soap and water. Seek medical attention if skin 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.**

**Ingestion:** Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

**Anticipated acute effects:** None known.

**Anticipated delayed effects:** None known.

**Most important symptoms/effects:** None known.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Avoid contact with skin and eyes. Do not breathe in fumes.

**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 specific authorities, evacuation of unprotected animals and people.

**Environmental Precautions:** Keep spilled product from entering sewers, waterways or ground water.

**Methods and Materials for Containment:** Contain spilled product by diking area with sand or earth.

**Methods and Materials for Clean-up:** Cover contained spill with an inert absorbent material such as sand, vermiculite, earth or other appropriate 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

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suitable detergent. See section 13 for disposal considerations.

### 7. HANDLING AND STORAGE

**Handling:**

**Precautions for safe handling:** Harmful if swallowed. Avoid contact with skin and eyes. Ensure adequate ventilation during handling and use. Do not handle broken packages without protective equipment. Immediately clean up spills that occur during handling. Keep containers 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 again.

**Storage:**

**Conditions for safe storage:** Store in its original container in dry, cool, well-ventilated area. Avoid excess heat) and high direct sunlight. Not to be stored next to foodstuffs, feed and water supplies. Keep out of reach of children, uninformed persons and animals. Do not contaminate other pesticides and fertilizers.

**Incompatible substances and mixtures:** Refer to product label.

**Packaging material:** Fluorinated plastic containers.

### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Permissible concentration**

Components	Exposure limits	Type of exposure limit	Source
Toluene	200 ppm 300 ppm 500 ppm	TWA Ceiling STEL	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:** For most well-ventilated conditions, no respiratory protection should be needed. If

used in a poorly ventilated area (airborne concentrations exceed exposure limits), use a NIOSH approved air-purifying respirator with cartridges/canisters approved for organic vapours.

**Hand Protection:** The use of chemically protective (impervious) gloves is recommended to prevent against skin contact.

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

**Skin and Body Protection:** Employee must wear appropriate protective (impervious) clothing; (rubber) boots, hat and equipment to prevent repeated or prolonged skin contact with this substance. Do not wear leather clothing.

**Emergency eyewash:** Where there is any possibility that an employee's eyes may be exposed to this substance; the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Brown liquid, Emusifiable concentrate.

**Odour:** None

**pH (1% aqueous dilution):** 5.0-7.5

**Melting point:** Not available.

**Freezing Point:** Not available

**Boiling Point:** Not available.

**Flash Point:** > 65 °C.

**Flammability:** Combustible liquid

**Upper/lower explosion limits:** Not available

**Vapour Pressure (mm Hg):** Not available.

**Relative Vapour Density:** Not available.

**Density/ 0.894 g/ml**

**Solubility:** Emulsifies 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:** Product is stable at ambient temperature and pressure, under normal storage and handling conditions.

**Possibility of Hazardous Reactions:** Will not occur.

**Conditions to Avoid:** Extreme heat or exposure to flames. Avoid moisture.

**Incompatible Materials:** Strong oxidizers, strong bases, strong reducing agents.

**Hazardous Decomposition Products:** None known.

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## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY:

Based on experimental data

Oral LD<sub>50</sub> rat > 5000 mg/kg

Dermal LD<sub>50</sub> rat > 2000 mg/kg

Inhalation LC<sub>50</sub> (4h) rat > 5.257 0 mg/l

**Skin Irritation/Corrosion:** Not classified as a skin irritant.

**Eye Damage/Irritation:** Causes serious eye irritation

**Skin Sensitization:** Product is not a skin sensitizer.

**Respiratory Sensitization:** There was no mortality during the study but the product is anticipated to be harmful when inhaled.

**Reproductive cell mutagenicity:** Not available.

**Carcinogenicity:** Not available.

**Reproductive toxicity:** Suspected of damaging the unborn child

**Specific target organ toxicity – single exposure:** May cause respiratory irritation.

**Specific target organ toxicity – repeated exposure:** May cause damage to organs through repeated exposure.

**Aspiration hazard:** May be fatal if swallowed and enters airways

**Chronic Effects:** Not available.

**POTENTIAL ADVERSE EFFECTS:** Not available

## 12: ECOLOGICAL INFORMATION

This product is considered a marine pollutant.

### ECOTOXICITY DATA:

#### Fish:

##### Clethodim

EC <sub>50</sub> (96h)	Rainbow trout	> 67 mg/l
	Bluegill sunfish	>120 mg/l

##### Haloxypop-P-methyl

EC <sub>50</sub> (96h)	Rainbow trout	> 0.46 mg/l
	Bluegill sunfish	> 0.0884 mg/l

#### Daphnia:

##### Clethodim

EC <sub>50</sub> (48h)		>120 mg/l
NOEC (48h)		>60 mg/l

##### Haloxypop-P-methyl

EC <sub>50</sub> (48h)		>12.3 mg/l
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#### Algae:

##### Clethodim

EC <sub>50</sub> (5d)	freshwater algae	57.8 mg/l
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##### Haloxypop-P-methyl

EC <sub>50</sub> (5d)	<i>Navicula pelliculosa</i>	1.72 mg/l
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#### Other aquatic organisms:

##### Haloxypop-P-methyl

EC <sub>50</sub> (14d)	<i>Lemna minor</i>	3.1 mg/l
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### Birds:

#### Clethodim

LD <sub>50</sub> :	Bobwhite quail	> 5000 mg/kg
	Mallard ducks	> 6000 mg/kg

#### Haloxypop-P-methyl

LD <sub>50</sub> :	Bobwhite quail	> 414 mg/kg
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### Bees:

#### Clethodim

LD <sub>50</sub> : (48h)		>100 µg/bee
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#### Haloxypop-P-methyl

LD <sub>50</sub> : (48h)		>100 µg/bee
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### Worms:

#### Clethodim

LC <sub>50</sub> :		> 454 mg/kg soil
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#### Haloxypop-P-methyl

LC <sub>50</sub> : (14d)		> 1343 mg/kg soil
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### Plants:

**Clethodim:** Metabolised to the sulfoxide, sulfone and S-methyl sulfoxide

**Haloxypop-P-methyl:** Not significantly metabolised. Forms conjugates with glucose and other sugars.

## ENVIRONMENTAL EFFECTS:

### Animals

**Clethodim:** Metabolised to the sulfoxide and sulfone

**Haloxypop-P-methyl:** In both ruminants and chickens. >95 % of the applied dose was excreted.

### Persistence and degradability:

**Clethodim:** Aerobic DT<sub>50</sub> in soil 1–3 d. Kd 0.08–1.6 (5 soil types).

**Haloxypop-P-methyl:** Primary degradation is soil is microbial and proceeds via cleavage of the aryloxy bridge to two metabolites; a minor metabolite results from hydrolysis of the propionic acid side-chain; ave. DT<sub>50</sub>

**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. Comply with local legislation applying to waste disposal.

**Container:** 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 rinsings to the



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contents of the spray tank before recycling or destroying the container in the prescribed manner. Comply with local legislation applying to waste disposal.

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.

### 14. TRANSPORT INFORMATION

**UN NUMBER: 3082**  
**ROAD TRANSPORT DR/IRD:** Class: 9  
 Packaging group: III  
 Shipping name: Environmentally Hazardous Substance, Liquid, N.O.S  
 (Haloxyfop-P-methyl 75 g/l + Clethodim 150 g/l)  
**Maritime Transport IMDG/IMO:** Class: 9  
 Packaging group: III  
 Shipping name: Environmentally Hazardous Substance, Liquid, N.O.S  
 (Haloxyfop-P-methyl 75 g/l + Clethodim 150 g/l)  
**Air Transport ICAO/IATA:** Class: 9  
 Packaging group: III  
 Shipping name: Environmentally Hazardous Substance, Liquid, N.O.S  
 (Haloxyfop-P-methyl 75 g/l + Clethodim 150 g/l)  
**Marine Pollutant (Y/N): Y**  
**Special/Environmental Precautions:** Wedge drums tightly to avoid movement.  
**Transport in bulk** (according to MARPOL 73/78, Annex II and the IBC code): Not available.

### END OF DOCUMENT

**Compiled:** June 2016  
**Reviewed:** June 2019  
**Revision no.:** (3)  
**Next revision date:** June 2024

For detailed information on revisions, contact the Registration holder.

### 15. REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation for the mixture:**  
 OSHA 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 1, 5, 10, 20, 25, 50, 100, 200 litres fluorinated plastic containers, labelled according to South African regulations and guidelines.

**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