

# DIRECT

# SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** DIRECT  
**Other identifier:** Polyether-polymethylsiloxane-copolymer + vegetable oil  
**Recommended use:** Adjuvant  
**Restrictions on use:** Agriculture

**Supplier:** Villa Crop Protection (Pty) Ltd.  
**Co. Reg. No.:** 1992/002474/07  
PO Box 10413,  
Aston Manor, 1630, 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>Health</b>		
Eye Irritation	Eye Irrit. 2	H319
Inhalation	Acute Tox. 4	H332
<b>Environment</b>		
Aquatic Chronic	Aquatic Chronic 3	H412

### The most important adverse effects:

#### Physiochemical effects:

None known.

#### Human health effects:

Causes serious eye irritation.  
Harmful if inhaled.

## Label elements:



**Signal word:** Warning.

#### Hazard statements:

H319: Causes serious eye irritation.  
H332: Harmful if inhaled.  
H412: Harmful to aquatic life with long lasting effects.

#### Precautionary statements:

P264: Wash hands and face thoroughly after handling.  
P271: Use only outdoors or in a well-ventilated area.  
P273: Avoid release to the environment.  
P280: Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.  
P305/351/338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337/313: If eye irritation persists: Get medical advice.  
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: Cat. 4  
Classification according to WHO: Cat. III  
Classification according to GPIC: Cat. Not available.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Substance/Mixture:** Mixture.

#### Composition:

Chemical Name	CAS	Conc. (M/v %)	Classification EC 1272/2008
Polyether-polymethylsiloxane-copolymer	134180-76-0	30 %	Eye Irrit. 2 (H319) Acute Tox. 4 (H332) Aquatic Chronic 3 (H412)

## 4. FIRST AID MEASURES

#### Inhalation:

Remove patient to fresh air. Ensure supply of fresh air.

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**Skin:**  
 Remove contaminated clothing, rinse skin with plenty of soap and water. Consult a doctor if skin irritation persists.

**Eyes:**  
 Flush eyes for 15 minutes with plenty of water. If irritation continues, get medical attention.

**Ingestion:**  
 Have victim rinse mouth thoroughly with water. If the person is alert and respiration is not depressed, give large quantity of water to drink. Seek medical advice.

**Anticipated acute effects:** None known.  
**Anticipated delayed effects:** None known.  
**Most important symptoms/effects:** None known.  
**Advice to physician:**  
 None applicable treat symptomatically.

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 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. 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. 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. See section 13 for disposal considerations.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:** Extinguish fires with carbon dioxide, dry powder, alcohol-resistant foam and water spray.

**Unsuitable Extinguishing Media:** High volume water jet, as this will spread the fire. Use a water jet only to cool heated containers.

**Specific hazards:** none known.

**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 containers 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 protective gear.

## 7. HANDLING AND STORAGE

**Handling:**  
**Precautions for safe handling:** Avoid contact with eyes and skin. Avoid the formation of aerosols or vapours during handling and application. 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 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 product. 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:** Keep under lock and key and out of reach of unauthorised persons, children and animals. Store product in its original labelled container, tightly closed, in an isolated, dry cool and well-ventilated area. Do not store product next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilisers.

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

**Packaging material:** Plastic containers.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Avoid contact with eyes and skin. Do not breathe in spray mist or fumes/vapours. Ventilate area of spill or leak, especially in contained areas. Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill containing 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 to be harmful to aquatic life and may cause long-term adverse effects in the aquatic environment.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**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 OELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly

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designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

### Personal Protective Equipment

**Respiratory Protection:** For most well-ventilated areas, 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:** Use chemical protective (impervious) rubber gloves to prevent contact with skin.

**Eye Protection:** Use chemical resistant safety goggles or face shield to prevent eye contact.

**Skin and Body Protection:** Employee must wear appropriate protective (impervious) clothing e.g. coveralls, boots, and hat to prevent repeated or prolonged skin contact with this product.

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Light Yellow Liquid.

**Odour:** Characteristic.

**pH (1% aqueous dilution):** Not available.

**Melting point:** Not available.

**Freezing Point:** Not available.

**Boiling Point:** Not available.

**Flash Point:** 102°C.

**Flammability:** Not available.

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

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

**Relative Vapour Density:** Not available.

**Density/Relative density:** 1.02 g / cm<sup>3</sup>

**Solubility:** Soluble.

**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 2 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:** May give rise to dangerous fumes if strongly heated.

**Conditions to Avoid:** Avoid extreme heat.

**Incompatible Materials:** None known.

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### Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide, silicon dioxide.

## 11. TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY:** Formulated product.

**Calculated according to WHO.**

**Oral LD<sub>50</sub> (24 h) rat >8400 mg/kg.**

**Calculated according to GHS.**

**Inhalation LC<sub>50</sub> (4 h) rat 3.6 mg/ℓ.**

**Skin Irritation/Corrosion:** Not available.

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

**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:** Not available.

**Specific target organ toxicity – repeated exposure:** Not available.

**Aspiration hazard:** Not available.

**Chronic Effects:** Not available.

### POTENTIAL ADVERSE EFFECTS:

**Inhalation:** Harmful if inhaled.

**Eye contact:** This product causes serious eye irritation.

**Skin contact:** Not available.

**Ingestion:** May be harmful if swallowed.

## 12. ECOLOGICAL INFORMATION

This product is harmful to aquatic life with long lasting effects.

**ECOTOXICITY DATA: Active ingredient:**

**Polyether-modified polysiloxane + vegetable oil**

**Fish:** Not determined.

**Daphnia:** Not determined.

**Algae:** Not determined.

**Birds:** Not determined.

**Bees:** Not determined.

**Worms:** Not determined.

**Plants:** Not determined.

### ENVIRONMENTAL EFFECTS:

**Animal:** Not determined.

**Persistence and degradability:** Not determined.

**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 adjuvant is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated

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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. 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 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 dumpsite, incineration plant or recycling company. Observe all labelled safeguards until container is destroyed.

### 14. TRANSPORT INFORMATION

**UN Number:** 3082  
**Road Transport ADR/IRD:**  
 Class: 9  
 Packaging group: III  
 UN Proper Shipping Name: Environmentally dangerous substance, Liquid.

**(Polyether-modified polysiloxane + vegetable oil)**

**Maritime Transport IMDG/IMO:**  
 Class: 9  
 Packaging group: III  
 UN Proper Shipping Name: Environmentally dangerous substance, Liquid.

**(Polyether-modified polysiloxane + vegetable oil)**

**Marine Pollutant (Y/N):** YES  
**Air Transport IATA/ICAO:**  
 Class: 9  
 Packaging group: III  
 UN Proper Shipping Name: Environmentally dangerous substance, Liquid.

**(Polyether-modified polysiloxane + vegetable oil)**

**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 50, 100, 500 ml, 1, 5 and 20 litres plastic containers/drums and 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 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

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For detailed information on revisions, contact the Registration holder.