

# UNIVERSAL GRAINWATCH 400 WDG

# SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** GRAINWATCH 400 WDG  
**Other identifier:** Carfentrazone 400 g/kg  
**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>Health</b>		
Dermal	Skin Irrit. 3	H316
Inhalation	Acute Tox. 4	H332
<b>Environment</b>		
Aquatic acute	Aquatic acute 1	H400
Aquatic chronic	Aquatic chronic 1	H410

**The most important adverse effects:**  
**Physiochemical effects:**  
 None known.  
**Human health effects:**  
 Harmful if inhaled.  
 Causes mild skin irritation.

### Label elements:



**Signal word:** Warning.  
**Hazard statements:**  
 H316: Causes mild skin irritation.  
 H332: Harmful if inhaled.  
 H400: Very toxic to aquatic life.  
 H410: Very toxic to aquatic life with long lasting effects.  
**Precautionary statements:**  
 P271: Use only outdoors or in a well-ventilated area.  
 P273: Avoid release into the environment.  
 P391: Collect spillage.  
 P501: Dispose of contents/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 4  
 Classification according to WHO: Unclassified  
 Classification according to GPIC for the active ingredient: Unclassified

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Substance/Mixture:** Mixture.

### Composition:

Chemical Name	CAS	Conc. (m/v %)	Classification EC 1272/2008
Carfentrazone-ethyl	128639-02-1	40%	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Sodium Dodecyl Sulfate	151-21-3	< 5%	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Aquatic Chronic 3 (H412)
Disodium edetate dihydrate	6381-92-6	< 5%	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H332) STOT SE 3 (H335) Aquatic Chronic 3 (H412)

## 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 and consult a doctor.

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**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. Obtain medical attention if irritation persists.

**Skin:** Wash skin gently and thoroughly with cold water and non-abrasive soap. Obtain medical attention if irritation persists.

**Eyes:** Flush eyes with clean water. Lift eyelids to facilitate irrigation. If present, remove contact lenses and continue rinsing. Seek medical attention if irritation persists.

**Ingestion:** If the person is alert, give one or two cups of water. Obtain medical attention in the event of symptoms or complaints.

**Anticipated acute effects:** Causes mild skin irritation. Harmful if inhaled.

**Anticipated delayed effects:** None known.

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

**Advice to physician:** There is no specific antidote available. Treat symptomatically and supportively.

## 5. FIRE-FIGHTING MEASURES

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

**Unsuitable Extinguishing Media:** Water.

**Specific hazards:** This product may emit toxic fumes when burned.

**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 skin. Do not breathe in spray or fumes. Ventilate area of spill or leak, especially in contained areas.

**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 to be very toxic to aquatic organisms and causes long-term adverse effects in the

aquatic environment. Any spillages or uncontrolled discharges into water courses should be reported immediately to the police and the Department of Water/Environmental Affairs.

**Methods and Materials for Containment:** Contain spilled product.

**Methods and Materials for Clean-up:** Contain spilled product by picking up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal. Do not create a powder cloud by using a brush or compressed air.

## 7. HANDLING AND STORAGE

**Handling:**

**Precautions for safe handling:** Avoid contact with skin. Ensure adequate ventilation during handling and use. Do not handle broken containers without protective equipment. Immediately clean up spills that occur during handling. 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 out of reach of unauthorised persons, children and animals. Store in its original labelled container in an isolated, dry, cool and well-ventilated area. Avoid cross contamination with other pesticides and fertilisers.

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

**Packaging material:** Plastic/paper containers and bags.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Permissible concentration**

Components	Exposure limits	Type of exposure limit	Source
Silica Amorphous, including natural diatomaceous earth	6 mg/m <sup>3</sup> (total)	8 hour TWA	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.

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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 a facemask if inhalation is likely to occur.

**Hand Protection:** Wear 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 eye wash fountain or appropriate alternative within the immediate work area for emergency use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Light to dark-brown solid

**Odour:** Not available.

**pH :** 6.0 - 9.0

**Melting point:** Not available.

**Freezing Point:** Not available.

**Boiling Point:** Not available.

**Flash Point:** Not available.

**Flammability:** Not flammable.

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

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

**Relative Vapour Density:** Not available.

**Density:** Not available.

**Solubility:** Not available.

**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:** Avoid extreme heat temperatures or exposure to flames.

**Incompatible Materials:** Not Available.

**Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>), Hydrogen fluoride, Hydrogen chloride and Nitrogen oxides.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY:

Calculated according to GHS.

**Oral LD<sub>50</sub>** > 5000 mg/kg.

**Dermal LD<sub>50</sub>** > 5000 mg/kg.

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

**Skin Irritation/Corrosion:** Causes mild skin irritation.

**Eye Damage/Irritation:** Not available.

**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:** None known.

**Aspiration hazard:** Not available

**Chronic Effects:** Not available.

### POTENTIAL ADVERSE EFFECTS:

**Inhalation:** None known.

**Skin contact:** Causes mild skin irritation.

**Eye contact:** None known.

**Ingestion:** None known.

## 12. ECOLOGICAL INFORMATION

This product is very toxic to aquatic life with long lasting effects.

### ECOTOXICITY DATA: Carfentrazone technical

#### Fish:

LC<sub>50</sub> (96 h) 1.6-43 mg/ℓ

#### Daphnia:

EC<sub>50</sub> (48 h) Daphnia 9.8 mg/ℓ

#### Algae:

EC<sub>50</sub> 5.7 - 17 ug/ℓ

#### Other aquatic

##### spp.:

EC<sub>50</sub> (96 h) Eastern oysters 2.05 ppm

Mysid shrimp 1.16 ppm

EC<sub>50</sub> (14d) *Lemna gibba* 0.0057 mg/ℓ

#### Birds:

LD<sub>50</sub> (Acute oral) Bobwhite quail >2250 mg/kg

LC<sub>50</sub> Mallard duck >5620 ppm

#### Bees:

LD<sub>50</sub> (Oral) (48 h) >35 ug/bee

(Contact) (72 h) >200 ug/bee

#### Worms:

LC<sub>50</sub> > 820 mg/kg

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## Plants:

Rapidly converted to the free acid, which is hydroxylated and then oxidised at the triazolinone methyl to form the dibasic acid; DT<sub>50</sub> (carfentrazone-ethyl) <7 d, DT<sub>50</sub> (carfentrazone) <28 d.

## ENVIRONMENTAL EFFECTS:

**Persistence and degradability:** Broken down in the soil by microbial action; not susceptible to photodecomposition or volatility following soil application. In the laboratory, soil DT<sub>50</sub> is a few hours, degrading to the free acid, which in turn has DT<sub>50</sub> 2.5-4.0 d.

**Bio-accumulative Potential:** Not determined.

**Mobility in soil:** Strongly adsorbed to sterile soils (K<sub>oc</sub> 750±60 at 25°C). In non-sterile soils, rapidly converted to the free acid, which has low soil binding (K<sub>oc</sub> 15-35 at 25°C, pH 5.5).

**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:** Emptied containers retain dust and product residues. Do not re-use the empty container for any other purpose. Triple rinse empty containers by inverting the empty container where it is used. Thereafter, rinse the container three times with a volume of water equal to a minimum of one third of that of the container. Empty the rinsings in the area where the pesticide is being used before recycling or destroying the container in the prescribed manner. Destroy the container by perforating and flattening and dispose of through an approved incineration plant or recycling company. Observe all labelled safeguards until container is destroyed.

## 14. TRANSPORT INFORMATION

**UN Number:** 3077  
**Road Transport ADR/IRD:**  
 Class: 9  
 Packaging group: III  
 UN Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (not including waste)  
 (Carfentrazone 400 g/kg)  
**Maritime Transport IMDG/IMO:**  
 Class: 9  
 Packaging group: III  
 UN Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (not including waste)  
 (Carfentrazone 400 g/kg)

**Marine Pollutant (Y/N):** Yes

**Air transport IATA/CAO:**

Class: 9  
 Packaging group: III  
 UN Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (not including waste)  
 (Carfentrazone 400 g/kg)

**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:** 200, 250, 500 gram and 1, 2, 5, 10, 15, 20 and 50 kilogram plastic/paper containers and bags.

**Additional H-statement (s) (formulants)**

**H315:** Causes skin irritation.  
**H319:** Causes serious eye irritation.  
**H335:** May cause respiratory irritation.  
**H412:** Harmful to aquatic life with long lasting effects.

**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.