

# CORDIAL 350 WDG

# SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** CORDIAL 350 WDG  
**Other identifier:** Chlorantraniliprole 350 WDG  
**Recommended use:** Insecticide  
**Restrictions on use:** Agriculture

**Supplier:** Universal Crop Protection (Pty) Ltd.  
**Co. Reg. No.:** 1983/008184/07  
 P.O. 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:**  
 (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

## 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 Irritation 3	H316
Eye	Eye irritation. 2/2A	H319
<b>Environment</b>		
Aquatic acute	Aquatic acute 1	H400
Aquatic chronic	Aquatic chronic 1	H410

### The most important adverse effects:

#### Physicochemical effects:

None known.

#### Human health effects:

Causes mild skin irritation.

Causes serious eye irritation.

#### Label elements:



**Signal word:** Warning.

#### Hazard statements:

H316: Causes mild skin irritation.

H319: Causes serious eye irritation.

H400: Very toxic to aquatic life.  
 H410: Very toxic to aquatic life with long lasting effects.

**Precautionary statements:**  
 P264+P265: Wash hands thoroughly after handling. Do not touch eyes.  
 P273: Avoid release into the environment.  
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P332+P317: If skin irritation occurs: get medical help.  
 P337+P317: If eye irritation persists: Get medical help.  
 P391: Collect spillage.  
 P501: Dispose of content/container to suitable landfill in accordance with local regulations.

**Other hazards:**  
 None known.

**Toxicity:**  
 Classification according to GHS: Unclassified.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Substance/Mixture:** Mixture.

### Composition:

Chemical Name	CAS	Conc. (m/m %)	Classification EC 1272/2008
Chlorantraniliprole	500008-45-7	36.50%	Aquatic Acute 1 (H400) Aquatic chronic 1 (H410)
Sodium Dodecylbenzenesulfonate	25155-30-0	< 2%	Acute Toxicity 4 (H302) Skin Irritation 2 (H315) Eye Damage 1 (H318)

## 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.

**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 shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Obtain medical attention if irritation persists. **Obtain medical attention if irritation occurs.**

**Eyes:** Flush eyes with clean water for at least 15 – 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. **Seek medical attention if irritation persists.**

**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

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not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.

**Anticipated acute effects:** Causes mild skin irritation. Causes serious eye irritation.

**Anticipated delayed effects:** None known.

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

**Advice to physician:** Treat symptomatically and supportively. No specific antidote known.

### 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:** High volume water jet. Use a water jet only to cool heated containers.

**Specific hazards:** Dense black smoke may be produced in case of fire which contains hazardous products of combustion.

**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. Remain upwind of fire. 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 protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Avoid contact with skin and eyes. Do not breathe in spray mist or fumes/vapours. 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 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 spilt product by diking area with sand or earth.

**Methods and Materials for Clean-up:** Contain spilt 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. Label containers with the contents and dispose of according to local regulations. Do not place spilt material back in original container. Do not re-use spilt material. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. Collect washings and add to the drums already collected. Do not flush spilt material or washings into drains or waterways. See section 13 for disposal considerations).

### 7. HANDLING AND STORAGE

#### Handling:

**Precautions for safe handling:** Avoid contact with skin and eyes. Do not breathe in spray mist or dust. 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 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 excess heat. Not to be stored 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/bags.

### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Permissible concentration:** No occupational exposure limits have been determined for the significant ingredients in this product.

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

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### 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:** Employees must wear chemically protective impervious gloves to prevent against skin contact.

**Eye Protection:** Employees must wear chemical safety goggles to prevent against eye contact. Contact lenses are not protective eye devices.

**Skin and Body Protection:** Employees must wear appropriate protective impervious clothing, rubber boots, hat and equipment to prevent repeated or prolonged skin contact with this substance.

**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:** Off-white, granules.

**Odour:** Very faint.

**pH (1% aqueous dilution):** 9.0 – 9.5

**Melting point:** Not available.

**Freezing Point:** Not available.

**Boiling Point:** Not available.

**Flash Point:** Not available.

**Flammability:** Not applicable.

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

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

**Relative Vapour Density:** Not available.

**Density/Relative density:** ± 1.0 g/cm<sup>3</sup>.

**Solubility:** Soluble in water, 70% min. after 1 minute of stirring.

**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:** Unlikely to occur.

**Conditions to avoid:** Extreme heat or exposure to flames, strong bases, strong reducing agents.

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

### Hazardous decomposition products:

**Chlorantraniliprole** is not fire hazardous, and under normal conditions is non-combustible. The dry form if allowed to accumulate may pose a fire hazard in the presence of an ignition source. Use self-contained respiratory protective equipment.

### 11. TOXICOLOGICAL INFORMATION

#### ACUTE TOXICITY:

**Calculated according to GHS.**

**Oral LD<sub>50</sub> (24 h)** > 29 000 mg/kg (rat).

**Dermal LD<sub>50</sub> (24h)** >130 000 mg/kg, (rats) (male/female).

**Inhalation LC<sub>50</sub> (4 h)** > 5 mg/l (rats) (male/female).

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

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

**Skin Sensitization:** Not classified.

**Respiratory Sensitization:** Not classified.

**Reproductive cell mutagenicity:** Not classified.

**Carcinogenicity:** Not classified.

**Reproductive toxicity:** Not classified.

**Specific target organ toxicity – single exposure:** Not classified.

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

**Aspiration hazard:** Not classified.

**Chronic Effects:** Not classified.

#### POTENTIAL ADVERSE EFFECTS:

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

**Eye contact:** Causes serious eye irritation.

### 12. ECOLOGICAL INFORMATION

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

#### ECOTOXICITY DATA:

##### Chlorantraniliprole (95%)

##### Fish:

Rainbow trout	>13.8 mg/l.
Bluegill sunfish	>15.1 mg/l.
Sheepshead minnows	>12 mg/l.

##### Daphnia:

EC<sub>50</sub> 0.0116 mg/l.

##### Algae:

EC<sub>50</sub> (120 h) *Selenastrum capricornutum* >2 mg/l.

##### Birds:

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

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Dietary LC<sub>50</sub> (5 d) bobwhite quail and mallard ducks >5620 mg/kg diet.

### Bees:

LD<sub>50</sub> Contact >4 µg/bee.  
 LD<sub>50</sub> Oral >104 µg/bee.

### Worms:

LC<sub>50</sub> (14 d) *Eisenia fetida* >1000mg/kg soil.

### Other aquatic spp:

LR<sub>50</sub> *Aphidius rhopalosiphi* and *Typhlodromus pyri* >750 g/ha

### ENVIRONMENTAL EFFECTS:

#### Based on information for the active ingredients:

#### Plants:

Very little degradation was observed in primary and rotational crops. Unchanged parent chlorantraniliprole was the major identified residue.

#### Persistence and degradability:

Degrades in the environment with DT<sub>50</sub> <2–12 months; shorter half-lives occur with crop cover. Degradation is mainly chemical, with a single major degrade which is not active and does not leach.

#### Bio-accumulative Potential:

Extensively metabolised by hydroxylation of the N-methyl group followed by N-demethylation, hydroxylation of the toluene methyl group, and cyclisation with loss of water to form a quinazolinone derivative. Log K<sub>ow</sub> 2.76 (pH 7).

#### Mobility in soil:

Sequestered in soil and so has limited mobility. K<sub>oc</sub> 244–464 ml/g.

**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. The product may be taken to a registered waste disposal site or incineration plant.

**Container:** Empty containers by inverting the empty container over the spray or mixing tank. Thereafter rinse the empty container three times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler ([www.croplife.co.za](http://www.croplife.co.za)). Do not bury, burn or donate the container to any other parties that may use it as

a container for food or beverages. 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 (Chlorantraniliprole 350 g/kg)

#### Maritime Transport IMDG/IMO:

Class: 9  
 Packaging group: III  
 UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Chlorantraniliprole 350 g/kg)

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

#### Air Transport IATA/ICAO:

Class: 9  
 Packaging group: III  
 UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Chlorantraniliprole 350 g/kg)

**Special / Environmental Precautions:** Wedge drums tightly to avoid movement.

**Transport in bulk:** Refer to MARPOL 73/78, Annex II and the IBC code.

### 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 50, 100, 250 and 500 grams and packed in 1, 2, 5, 10, 20, 25 and 50 kg plastic containers/bags and labelled according to South African regulations and guidelines.

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### Other hazard statements, abbreviations and explanations:

**H302:** Harmful if swallowed.

**H315:** Causes skin irritation.

**H318:** Causes serious eye damage.

**IATA:** International Air Transport Association.

**IBC:** International Bulk Chemical.

**ICAO:** International Civil Aviation Organization.

**IMDG:** International Maritime Dangerous Goods

**IMO:** International Maritime Organization.

**LD<sub>50</sub> value:** The median lethal dose or the amount of a toxic agent that is sufficient to kill 50 percent of a population within a certain period of time.

**OEL/RL:** Occupational exposure limit-recommended limit.

**PEL:** Permissible Exposure Limits.

**TWA:** Time-weighted average – The average exposure over a specified period, usually a nominal eight hours.

**ST/STEL:** Short-term exposure limits.

**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.