

# TERBUCIDE PLUS 900 WDG

# SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** TERBUCIDE PLUS 900 WDG  
**Other identifier:** Atrazine + Terbutylazine 900 WDG  
**Recommended use:** Herbicide  
**Restrictions on use:** Agricultural

**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:**  
 (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>		
Oral	Acute Toxicity 4	H302
Dermal	Acute Toxicity 5 Skin Irritation 3	H313 H316
Eye	Eye Irritation 2A	H319
Skin sensitization	Skin Sensitization 1	H317
Specific target organ toxicity – Repeated exposure	STOT RE 2	H373
<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 swallowed.

May be harmful in contact with skin.  
 Causes mild skin irritation  
 May cause an allergic skin reaction  
 Causes serious eye irritation.  
 May cause damage to organs through prolonged or repeated exposure.

**Label elements:**



**Signal word:** Warning

**Hazard statements:**

H302: Harmful if swallowed.  
 H313: May be harmful in contact with skin.  
 H316: Cause mild skin irritation.  
 H317: May cause an allergic skin reaction.  
 H319: Cause serious eye irritation  
 H373: May cause damage to organs through prolonged or repeated exposure.  
 H400: Very toxic to aquatic life.  
 H410: Very toxic to aquatic life with long lasting effects.

**Precautionary statements:**

P260: Do not breathe dust, mists and spray.  
 P264+P265: Wash hands and face thoroughly after handling. Do not touch eyes.  
 P270: Do not eat, drink or smoke when using this product.  
 P272: Contaminated work clothing should not be allowed out of the workplace.  
 P273: Avoid release into the environment.  
 P280: Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.  
 P301+P302+P317: IF SWALLOWED OR ON SKIN: Get medical help  
 P302+P352: IF ON SKIN: Wash with plenty of water and non-abrasive soap.  
 P305+P354+P338: IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P319: Get medical help if you feel unwell.  
 P321: See specific treatment on this label  
 P330: Rinse mouth.  
 P333+P317: If skin irritation or rash occurs: get medical help.  
 P337+P317: If eye irritation persists: Get medical help.  
 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:**

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Classification according to GHS: Category 4

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Composition:

Chemical Name	CAS	Conc. (m/v)	Classification EC 1272/2008
Atrazine	1912-24-9	45%	Skin Sensitization 1 (H317) STOT RE 2 (H373) Aquatic acute 1 (H400) Aquatic chronic 1 (H410)
Terbutylazine	107534-96-3	45%	Acute Toxicity 4 (H302) STOT RE 2 (H373) Aquatic acute 1 (H400) Aquatic chronic 1 (H410)
Terwet 1004	-	< 5%	Skin Irritation 2 (H315) Eye damage 1 (H318) Aquatic acute 2 (H401)

### 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 contact:** Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with non-abrasive soap or mild detergent and large amounts of water until no evidence of chemical remains. **Obtain medical attention if irritation persists.**

**Eye contact:** Flush eyes immediately with clean water for at least 15 to 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. **Obtain medical attention if irritation persists.**

**Ingestion:** **Seek medical attention.** 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. If the person is alert, rinse mouth thoroughly with water.

### Anticipated acute effects:

Harmful if swallowed. May be harmful in contact with skin. Causes mild skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

**Anticipated delayed effects:** May cause damage to organs through prolonged or repeated exposure.

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

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

### 5. FIRE FIGHTING MEASURES

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

**Unsuitable Extinguishing Media:** Water spray can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Use as little water as possible. Use spray or fog. Solid stream may cause spreading. Contain water used for fire fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

**Specific hazards:** Like most organic powders or crystals, under severe dusting conditions, this material may form explosive mixtures in air.

**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 protective gear.

### 6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

**Personal precautions:** Avoid contact with skin and eyes. Do not breathe in dust or mist. Ventilate area of spill or leak, especially in contained areas. Contaminated work clothing should not be allowed out of the workplace.

**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:** Avoid release into the environment. Prevent spilled product from entering sewers, waterways, or ground water. This product is classified as very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic

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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.

**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. 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. 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 spilled material or washings into drains or waterways. See section 13 for disposal considerations.

## 7. HANDLING AND STORAGE REQUIREMENTS

**Handling:** Harmful if swallowed. Avoid contact with eyes and skin. 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.

**Storage:**

**Conditions for safe storage:** Keep 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 CONTROL / PERSONAL PROTECTION

**Permissible concentration**

Components	Exposure limits	Type of exposure limit	Source
Tersperse 2700	10 mg/m <sup>3</sup>	TWA – Nuisance dust	Tersperse 2700 MSDS; Huntsman
Terwet 1004	10 mg/m <sup>3</sup>	TWA – Nuisance dust	Terwet 1004 MSDS; Huntsman

Kaolin (Total dust)	10 mg/m <sup>3</sup>	TWA	<a href="https://www.osha.gov/dsg/annotated-pels/tablez-1.html">https://www.osha.gov/dsg/annotated-pels/tablez-1.html</a>
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**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 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.

**Hand Protection:** The use of chemically protective 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 clothing; 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:** White water dispersible granule.

**Odour:** No characteristic odour.

**pH (1% aqueous dilution):** 8.7

**Melting point:** Not available.

**Freezing Point:** Not available.

**Boiling Point:** Not available.

**Flash Point:** Not available.

**Flammability:** Non-flammable.

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

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

**Relative Vapour Density:** Not available.

**Density:** Not available.

**Solubility:** Fully miscible in water.

**n-octanol/water partition coefficient:** Not available.

**Auto-ignition temperature:** Not available.

**Decomposition temperature:** Not available.

**Viscosity:** Not available.

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## 10. STABILITY AND REACTIVITY

**Chemical Stability:** This 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:** None known.

**Conditions to Avoid:** Excessive temperature, contact with any type of reactive chemical. Avoid metal packaging.

**Incompatible Materials:** Avoid contact with strong acids, strong alkalis, oxidizers or any other type of reactive material.

**Hazardous Decomposition Products:** Toxic gases may be released when the product decomposes on heating.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY:

**Oral LD<sub>50</sub> (24 h) rats:** >1400 mg/kg.

**Dermal LD<sub>50</sub> (24 h) rats:** >2200 mg/kg.

**Inhalation LC<sub>50</sub> (4 h), rats:** > 6.2 mg/l.

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

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

**Skin Sensitization:** May cause an allergic skin reaction.

**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:** May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard:** Not available.

**Chronic Effects (other targets e.g. developmental):** Not available.

### POTENTIAL ADVERSE EFFECTS:

**Skin contact:** Due to inerts, this mixture can cause mild skin irritation.

**Eye contact:** Due to inerts, this mixture can cause serious eye irritation.

**Ingestion:** Harmful if swallowed.

**Other information:** None known.

## 12. ECOLOGICAL INFORMATION

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

### ECOTOXICITY DATA: Active ingredients.

**Bees: (LD<sub>50</sub>, mg/bee)**

### Atrazine:

LD<sub>50</sub> (48hrs) > 97 µg/ bee (oral).

LD<sub>50</sub> (48hrs) > 100 µg/ bee (contact).

### Terbuthylazine:

LD<sub>50</sub> (48hrs) > 200 µg/bee (oral and contact).

### **Birds:**

#### Atrazine:

Acute oral

LD<sub>50</sub> (bobwhite quail) 940 mg/kg.

LD<sub>50</sub> (mallard ducks) >2000 mg/kg.

LD<sub>50</sub> (Japanese quail) >2000 mg/kg.

Dietary

LC<sub>50</sub> (8 d) (Japanese quail) >5000 mg/kg

LC<sub>50</sub> (8 d) (mallard duck) >1563 mg/kg.

#### Terbuthylazine:

Acute oral

LD<sub>50</sub> (ducks and Japanese quail) > 2000 mg/kg.

Dietary

LC<sub>50</sub> (8 d) (ducks and quails) > 5620 mg/kg.

### **Fish:**

#### Atrazine:

LC<sub>50</sub> (96 h) (rainbow trout) 11.0 mg/l.

LC<sub>50</sub> (96 h) (guppies) 4.3 mg/l.

#### Terbuthylazine:

LC<sub>50</sub> (96hrs) (rainbow trout) 2.2 mg/l.

LC<sub>50</sub> (96hrs) (mirror carp) > 5.7 mg/l.

### **Daphnia:**

#### Atrazine:

EC<sub>50</sub> (48hrs) ≥ 29 mg/l

#### Terbuthylazine:

EC<sub>50</sub> (48hrs) ≥ 69.3 mg/l

### **Algae:**

#### Atrazine:

EC<sub>50</sub> (72 hrs) *Scenedesmus subspicatus* 0.043 mg/l

EC<sub>50</sub> (96 hrs) *Pseudokirchneriella subcapitata* 0.01 mg/l

#### Terbuthylazine:

EC<sub>50</sub> (72 hrs) *Scenedesmus subspicatus* 0.016 mg/l

### **Earthworms:**

#### Atrazine:

LC<sub>50</sub> (14 d) (*Eisenia foetida*) 78 mg/kg soil.

#### Terbuthylazine:

LC<sub>50</sub> (14 d) (earth worm) > 1000 mg/kg soil

### **Other:**

**Atrazine:** Long-term studies in aquatic ecosystems indicate no permanent damage up to 0.020 mg/l.

### **Plants:**



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(Atrazine): Tolerant plants metabolise atrazine whereas sensitive plants accumulate atrazine, which leads to chlorosis and death.

(Terbutylazine): Triazine-tolerant plants rapidly dechlorinate terbutylazines.

**Animal:**

(Atrazine): In mammals, following oral administration, atrazine is rapidly and completely metabolised. More than 50% of the dose is eliminated in the urine and around 33% in the faeces within 24 hours.

(Terbutylazine): In mammals, following oral administration, 70-80% is eliminated in the urine and faeces within 24 hours, and almost all within 48 hours.

**Persistence and degradability:**

(Atrazine): Main metabolites under all conditions are desethylatrazine and hydroxyatrazine: DT<sub>50</sub> 35-80 d in the whole system.

(Terbutylazine): In aerobic soils, dissipation is mainly due to microbial activity with the formation of metabolites: DT<sub>50</sub> of 33-72 in the whole system.

**Bio-accumulative potential:**

Atrazine: Not determined.

Terbutylazine: Not determined.

**Mobility in soil:** Not determined for both atrazine and terbutylazine.

**Other adverse effects:** Not determined.

## 13. DISPOSAL CONSIDERATION

**Pesticide disposal:** Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or reprocessed. Never pour untreated waste or surplus products 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 container/bags may be taken to a registered waste disposal site or incineration plant.

**Container disposal:** Dispose of empty containers by inverting the empty container over the spray or mixing tank. 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 to the contents of the spray tank before 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:** 3077

**Road Transport ADR/RID:**

Class: 9  
 Packaging group: III  
 Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S  
 (Atrazine + Terbutylazine 900 g/kg)

**Maritime Transport IMDG/IMO:**

Class: 9  
 Packaging group: III  
 Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S  
 (Atrazine + Terbutylazine 900 g/kg)

**Considered a marine pollutant.**

**Air Transport IATA/ICAO:**

Class: 9  
 Packaging group: III  
 Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S  
 (Atrazine + Terbutylazine 900 g/kg)

**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.

## 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 500 g, 1, 2, 5, 10, 20 & 25 kg plastic containers/bags and labelled according to South African regulations and guidelines.

**Other hazard statements, abbreviations, and explanations:**

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**H315:** Cause skin irritation.

**H318:** Causes serious eye damage.

**H401:** 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.

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### **END OF DOCUMENT**

**Compiled:** February 2018

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**Next revision date:** June 2027

For detailed information on revisions, contact the Registration holder.