

ATRAZINE 900 WG

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: Atrazine 900 WG
Other identifier: Atrazine 900 WG
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

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
Health		
Oral	Acute Toxicity 4	H302
Inhalation	Acute Toxicity 5	H313
Dermal	Skin Sens. 1	H317
Specific target organ toxicity Repeated exposure	STOT RE 2 * (heart (oral))	H373
Environment		
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 (Acute Tox. 4).
 Maybe harmful in contact with skin (Acute Tox. 5).
 May cause an allergic skin reaction (Skin Sens. 1).

May cause damage to the heart (oral) through prolonged or repeated exposure (STOT RE 2 *).

Label elements:



Signal word: Warning

Hazard statements:

H302: Harmful if swallowed.
 H313: Maybe harmful in contact with skin.
 H317: May cause an allergic skin reaction.
 H373: May cause damage to the heart (oral) through prolonged or repeated exposure.
 H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P261: Avoid breathing dust, fumes, mists, vapours or spray.
 P264: Wash hands and face thoroughly after handling.
 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+P330+P317: IF SWALLOWED: Rinse mouth. Get medical help.
 P302+P352+P317: IF ON SKIN: Wash with plenty of water and non-abrasive soap. Get medical help.
 P319: Get medical help if you feel unwell.
 P333+P317: If skin irritation or rash occurs: Get medical help.
 P391: Collect spillage.
 P501: Dispose of contents/container to suitable landfill in accordance with local regulations.

Other hazards:

None known.

Toxicity:

Classification according to GHS: Category 4

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3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

Composition:

Chemical name	CAS	Conc. (m/m %)	Classification EC 1272/2008
Atrazine	1912-24-9	93.10	Skin Sens. 1 (H317) STOT RE 2* (H373) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Geropon T/36	37199-81-8	< 5	Eye Irrit. 2 (H319)
Sodium Lauryl sulphate	151-21-3	< 3	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) 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. If exposed or concerned, get medical advice.

Inhalation: Remove person from contaminated area to fresh air and assist breathing as needed. Get emergency medical help immediately 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. Do not rub skin. **Obtain medical attention if irritation or rash 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.

Ingestion: If more than 15 minutes from emergency medical care induce vomiting preferably using Ipecac Syrup (APF). Never give anything by mouth to an

unconscious person. If the person is alert, rinse mouth thoroughly with water. **Seek medical attention or call a poison control centre** for treatment advice.

Anticipated acute effects: Harmful if swallowed
 Maybe harmful in contact with skin. May cause an allergic skin reaction.

Anticipated delayed effects: May cause damage to the heart (oral) through prolonged or repeated exposure.

Most important symptoms / effects: None known.

Advice to physician: No specific antidote. Supportive care. Treatment based on judgement of physician in response to symptoms of patient.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use water spray, 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: During a fire, smoke may contain the original material in addition to unidentified toxic and/or irritating compounds.

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. On small fires, if area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the contamination hazard. 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 breathing dust, fumes, mists, vapours or spray.(respiratory sensitization).

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Avoid contact with skin. 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 as very toxic to aquatic life with long lasting effects. 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 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

Handling:

Precautions for safe handling: Harmful if swallowed. Maybe harmful in contact with skin. May cause an allergic skin reaction. Avoid breathing dust, fumes, mists, vapours or spray.(respiratory sensitization). 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 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 bags

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentration:

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.

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, boots, hat and equipment to prevent repeated or prolonged skin contact with this substance.

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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.

poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Powder. White.
Odour: Characteristic
Odour threshold: Not available.
pH (1% aqueous dilution): 7
Melting point: Not available.
Freezing Point: 1760C
Boiling Point: 2015 0C/101 kPa
Flash Point: Not applicable.
Flammability: Not applicable.
Upper / lower explosion limits: No flammable.
Vapour Pressure (mm Hg): Not available.
Relative Vapour Density: Not available.
Bulk density: Not available.
Solubility: Miscible in water.
n-octanol / water partition coefficient: Not available.
Auto-ignition temperature: Not Applicable.
Decomposition temperature: Not available.
Viscosity: Not applicable.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:
Calculated according to GHS.
Oral LD₅₀ (24h) >1972 mg/kg (rat)
Dermal LD₅₀ > 2148 mg/kg (rat)
Inhalation LC₅₀ (4h) > 10 mg/l (rat)
Skin Irritation / Corrosion: Maybe harmful in contact with skin.
Eye Damage / Irritation: Not calculated.
Skin Sensitization: May cause an allergic skin reaction.
Respiratory Sensitization: Not calculated.
Reproductive cell mutagenicity: Not calculated.
Carcinogenicity: Not calculated.
Reproductive toxicity: Not calculated.
Specific target organ toxicity – single exposure: Not calculated.
Specific target organ toxicity – repeated exposure: May cause damage to the heart (oral) through prolonged or repeated exposure.
Aspiration hazard: Not calculated.
Chronic Effects: Not calculated.
POTENTIAL ADVERSE EFFECTS:
Inhalation: Not calculated.
Ingestion: Harmful if swallowed.

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: Keep away from heat, sparks and exposure to flames.

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

Hazardous decomposition products:

Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. Hydrogen chloride gas, other compounds of chlorine. Water. Carbon monoxide

12. ECOLOGICAL INFORMATION

This product is expected to be very toxic to aquatic life with lasting effect.

ECOTOXICITY DATA:

Atrazine

Fish:		
LC ₅₀ (96 h)	Rainbow trout	11.0 mg/l
	Guppies	4.3 mg/l

Daphnia:		
EC ₅₀ (48 h)		29 mg/l

Birds:		
Acute oral LD ₅₀	Bobwhite quail, Mallard ducks and Japanese quail	940 mg/kg >2000 mg/kg

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Dietary LD ₅₀ (8d)	Japanese quail	>5000 mg/kg
	Mallard ducks	diet
		>1560 mg/kg
		diet

Bees:

LD ₅₀ contact	>100 µg/bee
LD ₅₀ oral	>97 µg/bee

Worms:

LC ₅₀	<i>Eisenia fetida</i>	48 mg/kg
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ENVIRONMENTAL EFFECTS

Based on information for the active ingredient

Animals: In mammals, following oral administration, atrazine is rapidly and completely metabolised, primarily by oxidative dealkylation of the amino groups (R. Ikonen et al., Toxicol. Lett., 1988, 44, 109; Bull. Environ. Contam. Toxicol., 1989, 43, 199; Y. Deng et al., J. Agric. Food Chem., 1990, 38, 1411), and by reaction of the chlorine atom with endogenous thiols. Diaminochlorotriazine is the main primary metabolite, which readily conjugates with glutathione. More than 50% of the dose is eliminated in the urine and around 33% in the faeces within 24 hours.

Plants: In tolerant plants, atrazine is readily metabolised to hydroxyatrazine and amino acid conjugates, with further decomposition of hydroxyatrazine by degradation of the side-chains and hydrolysis of the resulting amino acids on the ring, together with evolution of CO₂. In sensitive plants, unaltered atrazine accumulates, leading to chlorosis and death.

Persistence and degradability: Main metabolites under all conditions are desethylatrazine and hydroxyatrazine. Field DT₅₀ 16–1174d (median 38.5 d), the longer values being from cold or dry conditions. In water/sediment system DT₅₀ 14–20 d in the water and DT₅₀ 35–80 in the whole system. DT₅₀ under groundwater conditions 105–>200 d, depending on test system (M. J. Wood et al. (1991) In: A Walker (ed.), Pesticides in soils and water: current perspectives, BCPC Monograph no. 47, pp. 175–182). K_d 0.2–18 ml/g, K_{oc} 39–173 ml/g; desalkylated metabolites had values similar to those of atrazine (K_d 0.2–8.6 ml/g) whereas hydroxyatrazine (K_d 1.6–390) was much more strongly adsorbed.

Bio-accumulative potential: Not determined.

Mobility in soil: Not determined.

Other adverse effects: Long-term studies in aquatic ecosystems indicate no permanent damage up to 0.020 mg/l.

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: Plastic bag: Turn the bag inside out. Hold the bag over the spray or mixing tank and rinse the bag with running water for thirty seconds. Shake the rinsate off into the tank. Repeat the rinsing twice. Cut the bag into pieces and dispose of via an approved collector or recycler www.croplife.co.za. Do not bury, burn, or donate the container to any other parties that may use it as a container for foodstuffs.

14. TRANSPORT INFORMATION

UN Number: 3077

Road Transport ADR / ORD:

Class:	9
Packaging group:	III
UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Atrazine 900 g/kg)

Maritime Transport IMDG / IMO:

Class:	9
Packaging group:	III
UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Atrazine 900 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. (Atrazine 900 g/kg)

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

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

END OF DOCUMENT

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

Compiled: April 2010
Reviewed: October 2022
Revision no.: (3)
Next revision: October 2027

For detailed information on revisions, contact the Registration holder.

16. OTHER INFORMATION

Packaging: Packed in 5, 10, and 20 kilograms plastic bags labelled according to South African regulations and guidelines.

Other hazard statements, abbreviations and explanations:

H319: Causes serious eye irritation.

H412: Harmful to aquatic life with long-lasting effects.

IATA: International Air Transport Association.

IBC: International Bulk Chemical.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Dangerous Goods

IMO: International Maritime Organization.

LD₅₀ 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.

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.