

UNIVERSAL METRICANE 700 WDG

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: METRICANE 700 WDG
Other identifier: Metribuzin 700 WDG
Recommended use: Herbicide
Restrictions on use: Agriculture

Supplier: Universal Crop Protection (Pty) Ltd.
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:

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
Health		
Oral	Acute Tox. 4	H302
Eye Irritation	Eye irrit. 2	H319
Inhalation	Acute Tox. 3	H331
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: Toxic if inhaled.

Label elements:



Signal word: Danger.

Hazard statements:

H302: Harmful if swallowed.
H319: Causes serious eye irritation.
H331: Toxic if inhaled.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P261: Avoid breathing mists, vapours or spray.
P264: Wash hands and face thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P273: Avoid release into the environment.
P280: Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
P304/340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.
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: Cat. 3

Classification according to WHO: Cat. II

Classification according to GPIC (Active): Cat. II

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture.

Composition:

Chemical Name	CAS	Conc. (m/v %)	Classification EC 1272/2008
Metribuzin	21087-64-9	73.7 %	Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Sodium bis-(1-methylethyl) Naphthalen	1322-93-6	<5 %	Acute Tox. 4 (H302) Eye irrit. 2 (H319)

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e sulfonate			Acute Tox. 4 (H332) STOT SE 3 (H335)
2,5-Furandione, polymer with 2,4,4-trimethylpentene sodium salt	37199-81-8	<20 %	Eye irrit. 2 (H319)

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.

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:** 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. **Skin:** Remove product with water. Obtain medical attention if irritation persists.

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

Ingestion: Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water. Obtain medical attention if the patient feels unwell.

Anticipated acute effects: Toxic if inhaled. Causes serious eye irritation.

Anticipated delayed effects: None known.

Most important symptoms/effects: Symptoms of poisoning include abdominal pain, diarrhoea and vomiting, eye irritation, irritation of mucous membranes, and skin reactions.

Advice to physician: No specific antidote is available. Treat symptomatically and supportively when required. If large amounts have been ingested, perform gastric lavage and administer activated charcoal.

5. FIRE-FIGHTING MEASURES

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

Unsuitable Extinguishing Media: Water jet.

Specific hazards: This product may emit toxic fumes when burned, including hydrogen chloride, hydrogen cyanide, carbon monoxide and nitrogen oxides.

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

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with eyes. 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 will 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 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: Harmful if swallowed. Avoid contact with eyes. Ensure adequate ventilation during handling and use. Do not handle broken containers 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

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animals. Store in its original labelled container tightly closed, in an isolated, dry, cool and well-ventilated area. Avoid excessive heat. Avoid cross contamination with other pesticides and fertilisers.

Incompatible substances and mixtures: Refer to product label.

Packaging material: Plastic containers and bags.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentration

Components	Exposure limits	Type of exposure limit	Source
Total dust: Koalin	15 mg/m ³	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. 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 an organic cartridge respirator suitable for protection from mists/ vapours of pesticides if inhalation is likely to occur.

Hand Protection: This product is not likely to cause skin irritation, but generally, it is advised to wear chemically resistant gloves when handling pesticides.

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: This product is not likely to cause skin irritation, but 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 eyewash fountain or appropriate alternative within the immediate work area for emergency use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Greyish water dispersible granule.

Odour: Slightly sulphuric.

pH (1% aqueous dilution): 7.8.

Melting point: Not available.

Freezing Point: Not available.

Boiling Point: Not available.

Flash Point: Not flammable.

Flammability: Not flammable.

Upper/lower explosion limits: Not available.

Vapour Pressure (mm Hg): Not applicable.

Relative Vapour Density: Not applicable.

Density/Relative density: 0.55

Solubility: Soluble.

n-octanol/water partition coefficient: Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

Viscosity: Not applicable.

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: None known.

Conditions to Avoid: None known.

Incompatible Materials: This product is compatible with most other pesticides when used at normal rates. However, a compatibility test is required before using with other products. Do not physically mix concentrate directly with other herbicides or pesticide concentrates; always dilute first. The product may flocculate in the presence of **Paraquat**.

The product is relatively stable in neutral, weakly acidic and weakly alkaline media.

The product is rapidly hydrolysed to the hydroxy derivative in strong acids and alkalis.

Hazardous Decomposition Products: Carbon dioxides, nitric dioxides, nitric acid products and sulphur oxides are released when the product decomposes on heating.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Calculated according to GHS.

Oral LD₅₀ (24 h) rat > 420 mg/kg.

Inhalation LC₅₀ (4 h) rat > 0.8 mg/ℓ.

Skin Irritation/Corrosion: Not available.

Eye 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

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Chronic Effects: Not available.
POTENTIAL ADVERSE EFFECTS:
Inhalation: Toxic if inhaled.
Skin contact: Non-irritant. Minimally toxic.
Eye contact: Due to inert this product can cause serious eye irritation. May cause pain, redness or tears.
Ingestion: Moderately toxic. No significant effects are expected to develop if any small amounts are swallowed.

12. ECOLOGICAL INFORMATION

This product is very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

ECOTOXICITY DATA: Active ingredient.

Fish:

LC ₅₀ (96 h)	Rainbow trout	74.6 mg/l
	Golden orfe	141.6 mg/l
	Sheepshead minnows	85 mg/l

Daphnia:

LC ₅₀ (48 h)		49.6 mg/l
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Algae:

E _r C ₅₀	<i>Scenedesmus subspicatus</i>	0.021 mg/l
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Birds:

Acute oral LD ₅₀	Bobwhite quail	164 mg/kg
	Mallard ducks	460-680 mg/kg

Bees:

Not toxic to bees; LD ₅₀		35 mg/bee
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Worms:

LC ₅₀	<i>Eisenia foetida</i>	331.8 mg/kg dry soil
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Plants:
 In plants, metribuzin undergoes oxidative deamination and further degradation to water-soluble conjugates.

ENVIRONMENTAL EFFECTS:

Persistence and degradability: Rapidly degraded in soil; microbial breakdown is the major mechanism of loss; losses due to photodecomposition or volatilisation are insignificant; DT₅₀ in soil c. 1-2 mo; DT₅₀ in pond water c. 7 d. Degradation involves deamination, followed by further degradation to water-soluble conjugates.

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 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. 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 dust 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 or 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. 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 dump site, 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, NOS (Metribuzin 700 g/kg)

Maritime Transport IMDG/IMO:
 Class: 9
 Packaging group: III
 UN Proper Shipping Name: Environmentally hazardous substance Solid, NOS (Metribuzin 700 g/kg)

Marine Pollutant (Y/N): Yes

Air transport IATA/ICAO:
 Class: 9
 Packaging group: III
 UN Proper Shipping Name: Environmentally hazardous substance Solid, NOS (Metribuzin 700 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:
 OSHA 1993 Regulations for Hazardous Chemical Substances.

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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 1, 5, 10, 20 and 25 kg polyethylene plastic containers/bags and labelled according to South African regulations and guidelines.

Additional H-statement (s) (formulants)

H332: Harmful if inhaled.

H335: May cause respiratory irritation.

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.