

FLUMETSULAM 800 WDG

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: FLUMETSULAM 800 WDG
Other identifier: Flumetsulam
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:

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

2. HAZARDS IDENTIFICATION

UN GHS, Regulation EC 1272/2008 [EU-GHS/CLP] EU & SANS 10234:2008		
Hazard classes	Hazard categories	H-statements
Health		
Dermal	Acute Tox. 5 Skin Irrit. 3	H313 H316
Eye	Eye Irrit. 2	H319
Inhalation	Acute Tox. 4	H332
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:

May be harmful in contact with skin (Acute tox. 5).

Causes mild skin irritation (Skin Irrit. 2).

Causes serious eye irritation (Eye Irrit. 2).

Harmful if inhaled (Acute tox. 4).

Label elements:



Signal word: Warning

Hazard statements:

H313: May be harmful in contact with skin.

H316: Causes mild skin irritation.

H319: Causes serious eye irritation.

H332: Harmful if inhaled.

H400: Very toxic to aquatic life.

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

Precautionary statements:

P264+P265: Wash hands and face thoroughly after handling. Do not touch eyes.

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.

P302+P352: IF ON SKIN: Wash with plenty of water and non-abrasive soap.

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.

P362+P364: Take off contaminated clothing and wash it before reuse.

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: Category 4

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

Composition:

Chemical name	CAS	Conc. (m/m%)	Classification EC 1272/2008
Flumetsulam	98967-40-9	84.2 %	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Sodium dodecyl benzene	25155-30-0	< 5 %	Acute Tox. 4 (H302) Skin Irrit. 2

FLUMETSULAM 800 WDG

SAFETY DATA SHEET

sulfonate			(H315) Eye Dam. 1 (H318)
Calcium dodecyl benzene sulfonate	26264-06-2	< 5 %	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 4. (H413)

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 if breathing is 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.

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

Anticipated acute effects:

May be harmful in contact with skin. Causes mild skin irritation. Causes serious eye irritation. Harmful if inhaled.

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: Hazards or hazardous products arising from 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 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 eyes and skin. Do not breathe in spray mist or dust. 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 organisms and causes 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 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 inhaled. Avoid contact with skin and eyes. 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 product. 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:

FLUMETSULAM 800 WDG

SAFETY DATA SHEET

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 and bags.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentration

Components	Exposure limits	Type of exposure limit	Source
Diatomite	6 mg/m ³	TWA (8-hours)	(8- www.osha.gov)

Engineering Controls:

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this product 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: An approved respirator suitable for protection from mists/dust of pesticides is adequate. Limitations of respirator use specified by the approved agency and the manufacturer must be observed.

Hand Protection: The use of chemical 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: Employees must wear appropriate protective clothing, coverall, rubber boots, hat to prevent repeated or prolonged skin contact with this product.

Emergency eyewash: Where there is any possibility that an employee's eyes may be exposed to this product, 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: Dry, free flowing grey-brown granules.

Odour: Odourless.

Odour threshold: Not available.

pH (1% aqueous dilution): 5.1

Melting point: 251-253 °C (Tech)

Freezing Point: Not available.

Boiling Point: Not available.

Flash Point: Not applicable.

Flammability: Not flammable.

Upper / lower explosion limits: Not explosive.

Vapour Pressure (mm Hg): 3.7×10^{-7} mPa (25 °C)

Relative Vapour Density: Not available.

Density / Relative density: Not available.

Solubility: In water 49 mg/l (pH 2.5); solubility increases with pH. Very slightly soluble in acetone and methanol. Insoluble in hexane and xylene.

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. Avoid exposure to direct sunlight for long periods.

Incompatible materials: Strong acids or basis.

Hazardous decomposition products: Alcohols. Carbon monoxide and carbon dioxide may form under burning conditions or with incomplete combustion. If the product is involved in fire, oxides of nitrogen and halogen derivatives may be formed.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Calculated according to GHS:

Oral LD₅₀ (24h) > 5000 mg/kg (rat)

Dermal LD₅₀ (24h) 2347.72 mg/kg (rabbit)

Inhalation LC₅₀ (4h) 1.35 mg/l (rat)

Skin Irritation: 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:

Inhalation: Harmful if inhaled.

FLUMETSULAM 800 WDG

SAFETY DATA SHEET

Ingestion: Not classified.

Other information: The product may cause pain and/or slight irritation. Avoid contact with eyes.

12. ECOLOGICAL INFORMATION

This product is considered a marine pollutant.

ECOTOXICITY DATA:

Active ingredient: Flumetsulam

Fish:

LC₅₀ (96 h) Silverside >379 mg/l

Algae:

EC₅₀ (120 h) *Selenastrum* 0.0049 mg/l

capricornutum
Anabaena flos-aquae 0.167 mg/l

Birds:

Acute oral LD₅₀ Bobwhite quail >2250 mg/kg

Dietary LD₅₀ (8d) Mallard ducks >5620 mg/kg diet

Bobwhite quail >5620 mg/kg diet

Bees:

LD₅₀ >100 µg/bee

Worms:

LC₅₀ Earthworm >950 mg/kg soil

ENVIRONMENTAL EFFECTS

Based on information for the active ingredient: Flumetsulam

Plants: DT₅₀ in maize 2h, soya beans 18h, *Chenopodium* 131 h. Metabolites depend on the species; 5-hydroxy or 5-methoxy derivatives are common.

Persistence and degradability: Availability of flumetsulam in soil is principally dependent upon soil pH and organic matter. Herbicidal activity increases as pH increases and organic matter decreases.

Bio-accumulative potential: Not determined.

Mobility in soil: DT₅₀ in soil (25 °C, pH > 7, o.m. < 4%; or pH 6-7, o.m. c. 1%) <1 mo. DT₅₀ in soil (pH 6-7, om. 2-4%) 1-2 mo. K_{oc} 5-182; K_d 0.05-2.4.

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: Emptied containers retain product residues. Do not re-use the empty container for any other purpose. Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. 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). 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 / ORD:

Class: 9
Packaging group: III
UN Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S (Flumetsulam 800 g/kg)

Maritime Transport IMDG / IMO:

Class: 9
Packaging group: III
UN Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S (Flumetsulam 800 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 (Flumetsulam 800 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:

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

FLUMETSULAM 800 WDG

SAFETY DATA SHEET

16. OTHER INFORMATION

Packaging: Packed in 1, 5, 10, 12, 15, 20, 25 and 50 kg plastic containers and bags, labelled according to South African regulations and guidelines.

Other hazard statements, abbreviations and explanations:

H302: Harmful if swallowed.

H413: 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.

END OF DOCUMENT

Compiled: February 2021

Reviewed: July 2022

Revision no.: (2)

Next revision date: July 2027

For detailed information on revisions, contact the Registration holder.