

HALO 750 WDG

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: HALO 750 WDG
Other identifier: Halosulfuron 750 WDG
Recommended use: Herbicide
Restrictions on use: Agricultural

Supplier: Villa Crop Protection (Pty) Ltd.
Co. Reg. No.: 1992/002474/07
 PO Box 10413
 Aston Manor, 1630, South Africa

Telephone: (011) 3962233
Fax: (011) 3964666
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	H333
Skin	Skin Irritation 3	H316
Eye	Eye Irritation 2B	H320
Reproductive	Reproductive Toxicity 1B	H360D
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.
 May be harmful if inhaled.
 Causes mild skin irritation.
 Causes eye irritation.
 May damage fertility or the unborn child.

Label elements:



Signal word: Danger

Hazard statements:

H302: Harmful if swallowed.
 H333: May be harmful if inhaled.
 H316: Causes mild skin irritation
 H320: Causes eye irritation.
 H360D: May damage fertility or the unborn child.
 H400: Very toxic to aquatic life.
 H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P203: Obtain, read and follow all safety instructions before use.
 P264: Wash hands and face thoroughly after handling.
 P264+P265: Wash hands thoroughly after handling. Do not touch eyes.
 P270: Do not eat, drink or smoke when using this product.
 P273: Avoid release into the environment.
 P280: Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
 P301+P317: IF SWALLOWED: Get medical help.
 P304+P317: IF INHALED: Get medical help.
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P318: IF exposed or concerned, get medical advice.
 P330: Rinse mouth.
 P332+P317: If skin irritation occurs: get medical help.
 P337+P317: If eye irritation persists: Get medical help.
 P391: Collect spillage.
 P405: Store locked up.
 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: Category 4

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition:

Active Ingredient	CAS #	Content (m/v%)	GHS
Halosulfuron	100784-20-1	75%	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Reproductive Toxicity 1B (H360D)
Sodium alkyl naphthalene sulfonate	26264-58-4	<5%	Eye Irritation 2 (H319)

4. FIRST AID MEASURES AND PRECAUTIONS

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. Seek medical advice if necessary.

Inhalation: Immediately remove source of contamination or move victim to fresh air. If breathing has stopped, perform artificial respiration and administer oxygen. Avoid mouth-to-mouth resuscitation. Keep person warm and at rest. Treat symptomatically and supportively as and when required. Seek medical advice if necessary.

Skin contact: Remove contaminated clothing and shoes immediately. Gently wipe off excess chemical. Wash skin gently and thoroughly with non-abrasive soap or mild detergent with large amounts of water until no evidence of chemical remains. Seek medical advice if necessary.

Eye contact: Flush eyes immediately with large amounts of gently flowing cold water or normal saline solution, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15 to 20 minutes). If irritation persists, get 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: None known

Anticipated delayed effects: None known

Most important symptoms/effects: None known

Advice to physician: Aspiration hazard may contraindicate the use of gastric lavage. No specific antidote. Treat symptomatically and give supportive therapy. Contact local Poison Centre if needed.

5. FIRE FIGHTING MEASURES

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

Unsuitable Extinguishing Media: Solid stream water 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.

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. 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

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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.

safety, environmental, fire, and other applicable regulations.

7. HANDLING AND STORAGE REQUIREMENTS

Handling: Harmful if swallowed. Avoid inhalation and 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 bags and containers.

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: Water dispersible granule

Colour: Brown to grey

Odour: Scorched vanilla odour

pH (1% aqueous dilution): 6

Melting point: Not available.

Freezing Point: Not available.

Boiling Point: Not available.

Flash point: Not available

Flammability: Non-flammable.

Upper/lower explosion limits: Not applicable.

Vapour Pressure (mm Hg): Not available.

Relative Vapour Density: Not available.

Relative density: 0.656 g/cm³.

Solubility: In methanol 1.62 g/l (20 °C) based on T.G.A.I..

n-octanol/water partition coefficient: Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

Viscosity: Not applicable.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Permissible concentration

Compo nents	Exposure limits	Type of exposure limit	Source
Kaolin (Total dust)	10 mg/m ³	TWA	https://www.osha.gov/dsg/annotate-d-pels/tablez-1.html
Silica gel	15 mg/m ³	TWA	https://www.osha.gov/dsg/annotate-d-pels/tablez-1.html

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

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: Will not occur.

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Conditions to Avoid: Extreme heat or exposure to flames.

Incompatible Materials: Refer to label.

Hazardous Decomposition Products: When exposed to extreme heat or flames oxides of carbon and nitrogen may be produced.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Based on experimental data

Acute oral LD₅₀: 1278 mg/kg in rats

Acute dermal LD₅₀: >5000 mg/kg in rabbits

Acute inhalation LC₅₀: >5.7 mg/l air /4 hours

Skin Irritation/Corrosion: Mild skin irritant in rabbits.

Eye Damage/Irritation: Mild eye irritant in rabbits.

Skin Sensitization: Not classified.

Respiratory Sensitization: Not classified.

Reproductive cell mutagenicity: Not classified.

Carcinogenicity: Not classified

Reproductive toxicity: May damage fertility or the unborn child.

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: Not available.

Skin contact: Not available.

Eye contact: Not available.

Ingestion: Not available.

12. ECOLOGICAL INFORMATION

This product is considered a marine pollutant.

ECOTOXICITY DATA: Halosulfuron-methyl technical

Fish:

LC ₅₀ (96 h)	Rainbow Trout	>131 mg/l.
	Bluegill sunfish	>118 mg/l.

Daphnia:

EC ₅₀ (48 h)		>107 mg/l.
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Other aquatic spp.

EC ₅₀ (96h)	Oysters	116 ppm
	Mysid shrimp	106 mg/l
E _b C ₅₀ (7d)	<i>Lemna gibba</i>	0.000217 mg/l

Birds:

Acute oral LD ₅₀	Bobwhite quail	>2250 mg/kg.
Dietary LC ₅₀ (5d)	Bobwhite quail	>5620 ppm.
	Mallard ducks	>5620 ppm.

Bees:

LD ₅₀ (48h)	Contact	>100 mg/bee.
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Algae

EC ₅₀ (120 h)	<i>Selenastrum capricornutum</i>	0.0053 mg/l
	<i>Anabaena flos-aquae</i>	0.158 mg/l

Worms:

LC ₅₀	Earthworms	>1000 mg/kg.
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Plants: The major metabolite in maize is 3-chloro-1-methyl-5-sulfamoylpyrazole-4-carboxylic acid (cleavage of urea bridge and ester hydrolysis).

Animals: Rapidly eliminated from rats, in urine and faeces. The major metabolite is desmethyl halosulfuron-methyl. Further demethylation or hydroxylation of the pyrimidine ring yielded several minor mono- and di-hydroxylated metabolites.

ENVIRONMENTAL EFFECTS:

Persistence and degradability: Extensively metabolised in soil. In acidic soils, by hydrolytic cleavage of the sulfonylurea bridge to give aminopyrimidine and 3-chlorosulfonamide ester metabolites, which can undergo further hydrolysis to the acid. In alkaline soils, rearrangement and contraction of the sulfonylurea linkage, and opening of the pyrimidine ring are more important pathways.

Bio-accumulative Potential: Under acidic and alkaline laboratory aerobic soil conditions, mineralisation to CO₂ reached 9% and 62%, respectively., after one year. DT₅₀ <18 d.

Mobility in soil: Although laboratory adsorption/desorption studies indicated the potential for moderate mobility of halosulfuron-methyl, field studies demonstrated that mobility is limited, probably because of rapid soil dissipation.

Other adverse effects: Not determined.

13. DISPOSAL CONSIDERATION

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 container three times with a volume of water equal to a minimum of one third of that of

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the container. Add the rinsings 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.

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.

14. TRANSPORT INFORMATION

UN NUMBER: 3077
Road Transport ADR/RID:
Class: 9
Packaging group: III
Shipping name: Environmentally Hazardous Substance, Solid, N.O.S (halosulfuron 750 g/kg)

Maritime Transport IMDG/IMO:
Class: 9
Packaging group: III
Shipping name: Environmentally Hazardous Substance, Solid, N.O.S (halosulfuron 750 g/kg)

Air Transport IATA/ICAO:
Class: 9
Packaging group: III
UN Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S (halosulfuron 750 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.

END OF DOCUMENT

Compiled: March 2018
Reviewed: May 2022
Revision no.: (1)
Next revision: May 2027

For detailed information on revisions, contact the Registration holder.

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, 250, 300 g, 1, 5, 10, 12, 15, 20, 25 and 50 kg plastic containers and bags, labelled according to South African regulations and guidelines.