

Sharda International Africa (Pty) Ltd

P.O. Box 82021, Southdale, 2135, South Africa.

Tel: 031 764 3011, Tel: 087 822 2397

Email: rsa.regn@shardaintl.com, Website: <http://www.shardaintl.com>

(Co. Reg. No. 2010/002268/07)

Page 1 of 6

SAFETY DATA SHEET

“SHARDA HALOSULFURON 750 WG”

1. IDENTIFICATION OF PRODUCT AND COMPANY

Name of Product: “SHARDA HALOSULFURON 750 WG”

Active Ingredient: Halosulfuron

Product Use: Herbicides

Registration holder: Sharda International Africa (Pty) Ltd

Address: P.O. Box 82021, Southdale, 2135

Contact Tel. No.: 031-764-3011

Poison Centres: UNITAS Hospital: 0800-111-9900
Tygerberg Hospital: 021-931-6129
Netcare 911: 082911

2. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name: Halosulfuron-methyl

Chemical Name: methyl 3-chloro-5-(4,6-dimethoxypyrimidin-2-ylcarbamoylsulfamoyl)-1-methylpyrazole-4-carboxylate

CAS No.: [100784-20-1]

Chemical Family: sulfonyleurea

Chemical Formula: C₁₃H₁₅CIN₆O₇S

Use: A selective water dispersible granular herbicide packed in water-soluble bags for the post-emergence control of nutsegde and certain broadleaf weeds in crops as indicated.

Formulation: Halosulfuron 750 g/kg
Water Dispersible Granule

Hazardous Ingredient: Halosulfuron / sulfonyleurea

Symbol: Xi, Xn

Indication of danger: Irritating substance.

Risk phrases: R 36.

3. HAZARD IDENTIFICATION

Major Health Hazard: Slightly irritating to eyes.

Inhalation: Avoid inhalation of spray mist.

Eye: The product may cause slight irritation. Avoid contact with eyes.

Skin: Avoid contact with skin.

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Page 2 of 6

Swallowed: Never give fluids or induce vomiting if patient is unconscious or is having convulsions.

4. FIRST AID MEASURES AND PRECAUTIONS

Inhalation:

Harmful. Avoid inhalation of spray mist. If vapours or mists have been inhaled, remove the source of contamination or move victim to fresh air. Obtain medical attention immediately.

Skin contact:

Remove contaminated clothing, shoes and leather goods. Wash skin gently and thoroughly with cold water and non-abrasive soap. Obtain medical attention if irritation persists.

Eye contact:

Immediately flush the eyes with clean, gently flowing water for at least 15 - 20 minutes, holding the eyelid(s) open. Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing eye(s). Obtain medical attention if irritation persists.

Ingestion:

Obtain medical attention immediately. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told so to do by the poison control centre or doctor. Do not give anything by mouth to unconscious person. Remove visible particles from mouth.

Advice on treatment:

No specific antidote known. Have the product container or label with you when calling a poison control centre or doctor. Treat symptomatically

5. FIRE FIGHTING MEASURES

Fire and explosion hazard: Not flammable. No risk of an explosion from this product under normal circumstances when involved in a fire.

Hazardous products of combustion: None.

Extinguishing agents: Extinguish fires with carbon dioxide, dry powder, water or foam. Avoid the accumulation of polluted run-off from the site.

Firefighting: Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a water spray, CO₂, dry chemical and foam-extinguishing agent for the type of surrounding fire. If area is exposed to fire and conditions permit, let fire burn itself out. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind. Burning chemicals may produce by-products more toxic than the original material. Remove container from fire area if possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal. Avoid pollution of waterways. Do not use high volume water jet, due to contamination risk. Contain water used for firefighting for later disposal. Avoid the accumulation of polluted run-off from the site.

Personal protective equipment: If product is on fire, wear self-contained breathing apparatus and full protective equipment. Do not breathe fumes from burning material. Keep upwind.

6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal precautions: Avoid contact with skin and eyes. Do not breathe in spray or fumes. For personal protection see Section 8.

Environmental precautions: Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs. Considered as Marine Pollutant.

Occupational spill: For dry spills, shovel up and sweep up with damp earth or sand or other suitable absorbents, taking care not to raise a dust cloud. Place the material into a labelled, clean, dry container and store in a safe place to await proper disposal. All contaminated cleaning materials should be placed in

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Page 3 of 6

closable receptacles.

In situations where product comes in contact with water, contain contaminated water for later disposal. Do not flush spilled material into drains. Do not contaminate water while cleaning equipment or disposing of wastes. Keep spectators away and upwind.

7. HANDLING AND STORAGE REQUIREMENTS

Handling: This is a water-dispersible product. It may be packaged in a pre-measured water-soluble packet, which readily dissolves in water. Exposure to moisture or excessive handling of the soluble packets will cause them to break. Harmful by inhalation, skin or eye contact. Avoid inhalation of spray and vapour and contact with eyes and skin. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Operators should change and wash clothing daily. Remove clothing immediately if the herbicide gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

Storage: Keep out of reach of unauthorised persons, children and animals. Store in its original labelled container in isolated, dry, cool and well-ventilated area. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with

8. EXPOSURE CONTROL / PERSONAL PROTECTION

It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

PERSONAL PROTECTIVE EQUIPMENT: If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

Respirator: An approved respirator suitable for protection from mists of pesticides is adequate. Limitations of respirator use specified by the approved agency and the manufacturer must be observed.

Clothing: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

Gloves: Employee must wear appropriate synthetic protective gloves to prevent contact with this substance.

Eye protection: The use of safety goggles is recommended.

Emergency eye wash: 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: Brown to grey granule.

Odour: Slight odour.

Flammability: Not Flammable.

Flash point: Not applicable.

Melting point: 175.5 to 177.2 0C.

Vapour pressure: <0.01 mPa @ 25 0C).

pH: Fresh sample: 6.0 to 8.0. pH 1 % solution 4.74.

Explosivity: Not explosive.

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Page 4 of 6

Solubility in water: 0.015 (pH 5); 1.65 (pH 7) g/l 20 °C.

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

10. STABILITY AND REACTIVITY

Stability: Stable for 2 years under normal conditions.

Conditions and Materials to Avoid: Store in a cool, well-ventilated place away from foodstuffs, reducing agents and acids.

Hazardous decomposition products: Unlikely to occur.

Instability: Store under cool, dry conditions (below 48.9 °C). Do not store under moist conditions.

11. TOXICOLOGICAL INFORMATION

Acute oral LD50: 5000 mg/kg (Technical).

Acute dermal LD50: >2000 mg/kg (Technical).

Inhalation: 4-hour: >4.98 mg/l.

Acute skin irritation: Formulation: Non-irritating

Acute eye irritation: Non-irritating

Teratogenic effects: None.

Developmental toxicity: Slight developmental toxicity. Mutagenic effects: No effect.

Carcinogenicity: No effect.

12. ECOLOGICAL INFORMATION

Mobility, Degradability & Accumulation: In Plants the major metabolite in maize is 3-chloro-1-methyl-5-sulfamoylpyrazole-4-carboxylic acid (cleavage of urea bridge and ester hydrolysis).

Soil/Environment: Extensively metabolized in soil. In acidic soils, by hydrolytic cleavage of the sulfonyleurea bridge to give amino pyrimidine and 3-chlorosulfonamide ester metabolites, which can undergo further hydrolysis to the acid. In alkaline soils, rearrangement and contraction of the sulfonyleurea linkage, and opening of the pyrimidine ring are more important pathways. Under acidic and alkaline laboratory aerobic soil conditions, mineralization to CO₂ reached 9% and 62%, resp., after one year. DT₅₀ <18 d. 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.

ECOTOXICOLOGY:

Birds: Acute oral LD₅₀ for bobwhite quail >2250 mg/kg. Dietary LC₅₀ (5 d) for bobwhite quail and mallard ducks >5620 ppm.

Fish: LC₅₀ (96 h) for bluegill sunfish >118, rainbow trout >131 mg/l.

Bees: LD₅₀ (dermal) >100 µg/bee.

Daphnia: EC₅₀ (48 h) >107 mg/l.

Algae: EC₅₀ (5 d) for green algae (*Selenastrum capricornutum*) 0.0053, blue-green algae (*Anabaena flos-aquae*) 0.158 mg/l.

Other aquatic spp.: EC₅₀ (96 h, flow through) for oysters 116 ppm, mysid shrimp (*Mysidopsis bahia*) 106 mg/l. IC₅₀ (14 d) for *Lemna gibba* 0.038 µg/l (pH 5).

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Page 5 of 6

13. DISPOSAL CONSIDERATION

Pesticide and container disposal: Open dumping or burning of this pesticide is prohibited. 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. Emptied containers retain vapour and product residues observe all labelled safeguards until container is destroyed. Empty the container of excess product into the mixing tank or spray tank of the applicator. Destroy the emptied containers by perforation and flattening. Bury in an approved dumpsite. Do not re-use the empty container for any other purpose. Comply with any local legislation applying to disposal. Prevent contamination of food, feedstuffs, drinking water and eating utensils.

14. TRANSPORT INFORMATION

UN NUMBER:	3077				
Road Transport ADR/RID:					
Class:	9				
Packaging group:	IV				
Shipping name:	Environmentally Substance, (sulfonylurea g/kg)	Solid,	Hazardous N.O.S	Halosulfuron	750
Maritime Transport IMDG/IMO:					
Class:	9				
Packaging group:	IV				
Shipping name:	Environmentally Substance, (sulfonylurea g/kg)	Solid,	Hazardous N.O.S	Halosulfuron	750

15. REGULATORY INFORMATION

Symbol: Xi, Xn
Indication of danger: Irritant, Harmful substance

Risk phrase(s):

R 36 Irritating to eyes.

Safety phrases:

S 2 Keep out of the reach of children.

S 13 Keep away from food, drink and animal feeding stuffs.

S 23 Do not breathe vapour/spray.

S 24/25 Avoid contact with skin and eyes.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

16. OTHER INFORMATION

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

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 use of the product. It is not applicable to unusual or non-standard uses of neither the product nor where instructions or recommendations are not followed. All information is given in good

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Page 6 of 6

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