

VILLA DISGRAN 750 WDG

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF SUBSTANCE AND COMPANY

Product Name: DISGRAN 750 WDG
 Herbicide

UN No. 3077

Supplier: Villa Crop Protection (Pty) Ltd.
 PO Box 10413
 Aston Manor, 1630, South Africa

Telephone: (011) 3962233

Fax: (011) 3964666

Website: www.villacrop.co.za

Emergency telephone: +27 11 396 2233
 (08:00 – 16:30)

24 Hr Emergency Numbers:

Bateleur: +27 83 1233 911 or
 (Client: Villa Crop Protection) +27 860 333 911

In case of Poisoning:

Western Cape Poisons Tel. Service +27 861 555 777
 Griffon Poison Information Centre +27 82 446 8946
 Tygerberg Hospital +27 21 931 6129

2. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name: Triasulfuron

Chemical Name: 1-[2-(2-chloroethoxy)phenylsulfonyl]-3-(4-methoxy-6-methyl-1,3,5-triazin-2-yl)urea (IUPAC)

CAS No.: [82097-50-5]

Chemical Family: sulfonylurea

Chemical Formula: C₁₄H₁₆ClN₅O₅S (Mol. wt.: 401.8)

Use: A selective herbicide, absorbed by the leaves and roots, and rapidly translocated to meristems. Control broad-leaved weeds pre- and post-emergence.

Formulation: Triasulfuron: 750 g/kg
 Water Dispersible Granule

Hazardous Ingredient: Triasulfuron

Symbol: N

Indication of danger: Environmentally Hazardous Substance

Risk phrases: R 20, R 36/37/38, R 50, R 53

3. HAZARD IDENTIFICATION

Major Health Hazard: No major health hazard is known.

Inhalation: Not harmful. Avoid inhalation of spray mist. Long term inhalation of nuisance dust may overload lung clearance mechanism. **Eye:** The product may cause mild irritation. Unlikely to cause more than mild transient discomfort. **Skin:** Product is not harmful. No evidence of health effects associated with long term skin exposure.

Swallowed: Mild toxicity. Product may be irritating to mucous membranes. Unlikely to cause more than mild transient discomfort.

4. FIRST AID MEASURES AND PRECAUTIONS

Inhalation: If vapours or mists have been inhaled, remove the source of contamination or move victim to fresh air. Obtain medical attention if in doubt.

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 lukewarm water for at least 20 minutes, holding the eyelid(s) open. Obtain medical attention if irritation persists.

Ingestion: Obtain medical attention immediately. If the person is alert, rinse mouth thoroughly with water.

Advice on treatment: There is no specific antidote available. 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: Fire decomposition products from this product, may be toxic if inhaled.

Extinguishing agents: Extinguish fires with carbon dioxide, dry powder, or alcohol-resistant foam. Water spray can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Use as little water as possible. Use spray or fog. Solid stream may cause spreading. Contain water used for fire fighting for later disposal. 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 recommended extinguishing agent for the type of surrounding fire. 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. 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. Dyke fire control water for later disposal. Do not scatter the material. Avoid pollution of waterways. Do not use high volume water jet, due to contamination risk. Contain water used for fire fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

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Personal protective equipment: Fire decomposition products from this product, may be toxic if inhaled. Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus. 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 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: 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. 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: Light brown granules.

Odour: Odourless.

Flammability: Not Flammable.

Flash point: Not applicable.

Solubility: Forms suspension in water. Wettable.

pH: 6.7.

Density: 0.5.

10. STABILITY AND REACTIVITY

Stability: Stable under normal warehouse conditions, well-ventilated cool and dry place. Product is unlikely to react or decompose under normal storage conditions.

Storage stability: Stable for up to 2 years when stored in a dry, cool covered warehouse in original, well-labelled containers. Store at low temperature conditions, below 50°C, preferably below 30 °C and not for prolonged periods in direct sunlight.

Conditions and Materials to Avoid: Avoid contact with strong oxidizing agents.

Hazardous decomposition products: Fire causes carbon dioxide and if combustion is incomplete, carbon monoxide and smoke. Nitrogen compounds, under certain circumstances, and oxides of nitrogen. Occasionally hydrogen cyanide gas, oxides of sulphur (sulphur oxide is a respiratory hazard), other sulphur compounds, hydrogen

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chloride gas and other compounds of chlorine may be formed.

11. TOXICOLOGICAL INFORMATION

Acute oral LD₅₀: *Technical* in rats: > 5000 mg/kg
Formulation calculated: > 6000 mg/kg.
Acute dermal LD₅₀: *Technical* in rats: > 2 000 mg/kg in rats.
Formulation calculated: > 2000 mg/kg.
Inhalation: Formulation is Harmful.
Technical: LC₅₀ in rats: > 5.8 mg/ℓ (4 hours).
Acute skin irritation: *Formulation:* Non-irritant.
Acute eye irritation: *Formulation:* Mild irritant.
Dermal sensitisation: May be a skin sensitizer. No evidence of health effects associated with long term skin exposure.
Neurotoxicity: No evidence was found of neurotoxicity in any of the toxicity studies at very high doses.
Developmental toxicity: **Triasulfuron** did not elicit evidence of developmental toxicity up to the high dose of 240 mg/kg/day. NOEL is established at > 240 mg/kg/day. Maternal toxicity was observed (decreased body weight gain during gestation) and NOEL is established at 120 mg/kg/day.
Carcinogenicity: Data suggest that **Triasulfuron** is not carcinogenic and classified as category E: not likely to be a human carcinogen.
ADI: 0,012 mg/kg body weight.

12. ECOLOGICAL INFORMATION

Mobility, Degradability & Accumulation: The degradation behaviour in soil is determined by the soil type, pH and temperature and moisture content. Field studies with silty loam, clay loam and sandy loam, showed a median DT₅₀ of 19 days, depending on soil type. In plants, (wheat) metabolism of **Triasulfuron** is by hydroxylation, followed by conjugation of various hydroxy metabolites with glucose. DT₅₀ in forage is approximately 3 days. In straw and grain, no residues were detected at harvest time.
 In rats, **Triasulfuron** is excreted primarily in the urine (70 to 999%) with lesser amounts excreted in the faeces. Majority of excretion occurs in the first 24 hours following exposure. Residue levels in the tissue are < 0.1% of the administered dose. The major excretion product is unchanged **Triasulfuron** in both urine and faeces.
ECOTOXICOLOGY:
 Non toxic to birds. Toxic to fish, aquatic organisms and plants. Not toxic to bees.
Birds:
 Oral LD₅₀: Quail: > 2150 mg/kg
 Mallard ducks: > 2150 mg/kg

Fish:
 LC₅₀ (96 hours): Bluegill sunfish: > 100 mg/ℓ
 Rainbow trout: > 100 mg/ℓ
 Cat fish: > 100 mg/ℓ
Bees:
 LD₅₀ (acute and contact) > 100 µg/bee
Daphnia:
 LC₅₀ (96 hours): > 100 mg/ℓ
Algae:
 EC₅₀ (5 to 14 days): *Selenastrum* 0.035 mg/ℓ
Earthworms:
 LC₅₀ (14 days): > 1000 mg/kg soil

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. Product is a Marine Pollutant.
 Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is destroyed.
 Emptied containers retain vapour and product residues. Observe all labelled safeguards. 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 dump site. 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: III
 Shipping name: Environmentally Hazardous Substance, Solid, N.O.S (Triasulfuron 750 g/kg)
Maritime Transport IMDG/IMO:
 Class: 9
 Packaging group: III
 Shipping name: Environmentally Hazardous Substance, Solid, N.O.S (Triasulfuron 750 g/kg)
Considered a marine pollutant.

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15. REGULATORY INFORMATION

Symbol: N.
Indication of danger: Environmentally
Hazardous Substance.

Risk phrase(s):

R 20 Harmful by inhalation.
R 36/37/38 Irritating to eyes, respiratory system and skin.
R 50 Very toxic to aquatic organisms.
R 53 May cause long-term adverse effects in the aquatic environment.

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 150 g, 1, 5, 10, 15, 20, 25 and 50 kg plastic containers or 15 g water-soluble bags and 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 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.

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