

NICOSULFURON 750 WDG

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Nicosulfuron 750 WDG
Other identifier: Nicosulfuron 750 g/kg
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:

Bateleur: +27 86 199 9071
 (Client: Villa Crop Protection)

Poisoning:

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

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 | H313 |
| Inhalation | Acute Tox. 5 | H333 |
| Environment | | |
| Aquatic chronic | Aquatic Chronic 1 | H410 |

The most important adverse effects:

Physiochemical effects:

None known

Human health effects:

May be harmful if inhaled.

May be harmful in contact with skin.

Label elements:



Signal word: Warning

Hazard statements:

H313: May be harmful in contact with skin.

H333: May be harmful inhaled.

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

Precautionary statements:

P273: Avoid release to the environment.

P391: Collect spillage.

P501: Dispose of contents/container in accordance with local regulations.

Special labelling of certain mixtures:

None known.

Other hazards:

None known.

Toxicity:

Classification according to GHS: Category 5

Classification according to WHO: Category III

Classification according to GPIC: Unclassified

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture:

Mixture

Composition:

| Chemical Name | CAS | Conc. (m/m %) | Classification EC 1272/2008 |
|---------------|-------------|---------------|-----------------------------|
| Nicosulfuron | 111991-09-4 | 75% | Aquatic Chronic 1 (H410) |

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 and consult a doctor / poison control centre.

Inhalation: Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation persists / person feels unwell.

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 / person feels unwell.

Eyes: Flush eyes with clean water. Lift eyelids to facilitate irrigation. If present, remove contact lenses and continue rinsing. Seek medical attention if irritation persists.

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 if inhaled.

May be harmful in contact with skin.

Anticipated delayed effects: Based on animal data, repeated ingestion of high doses of this product may cause reduced white blood cell production.

Most important symptoms/effects: None known.

Advice to physician: Treat symptomatically and supportively. No specific antidote known.

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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: None known.

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

Personal Precautions: Avoid contact with skin. Do not breathe in spray mist or dust. Ventilate area of spill, 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 with 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 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: Avoid contact with 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 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 |
|---|-----------------------|------------------------|--|
| Silica: Crystalline Quarts (Total dust) | 0.3 mg/m ³ | 8 hour TWA | California Division of Occupational Safety and Health (www.osha.gov) |
| Kaolin (Total dust) | 15 mg/m ³ | / | Occupational Safety and Health Administration (www.osha.gov) |

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 safety, environmental, fire, and other applicable regulations.

Personal Protective Equipment:

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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: Off-white homogeneous granule with no extraneous material.

Odour: Odourless.

pH (1% aqueous dilution): 5.9.

Melting point: 141 – 144 °C.

Freezing Point: Not available.

Boiling Point: Not available.

Flash Point: Not applicable.

Flammability: Not available.

Upper/lower explosion limits: Not applicable.

Vapour Pressure (mm Hg): < 7.5 x 10⁻⁵ Pa (110 °C)

Relative Vapour Density: Not available.

Density: Not available.

Solubility: In water - Dispersible. 3.6 g/l at pH 5; 12.2 g/l at pH 7; 39.2 g/l at pH 9 @ 250 °C.

In acetone 18, ethanol 4.5, chloroform, dimethylformamide 64, acetonitrile 23, toluene 0.370, hexane <0.02, dichloromethane 160 (all in g/kg, 25 °C).

n-octanol/water partition coefficient: Not available.

Auto-ignition temperature: Not applicable.

Decomposition temperature: Not available.

Viscosity: Not applicable.

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.

Conditions to Avoid: Extreme heat or exposure to flames

Incompatible Materials: Strong oxidizers, strong bases, strong reducing agents.

Hazardous Decomposition Products: Alcohols. Carbon monoxide and carbon dioxide may form under burning conditions or with incomplete combustion.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Calculated according to GHS (conforms to WHO)

Oral LD₅₀ > 6600 mg/kg

Dermal LD₅₀ > 2600 mg/kg

Inhalation LC₅₀ > 7.2 mg/l

Skin Irritation: None known.

Eye Damage/Irritation: None known.

Skin Sensitization: None known.

Respiratory Sensitization: None known.

Reproductive cell mutagenicity: None known.

Carcinogenicity: None known.

Reproductive toxicity: None known.

Specific target organ toxicity – single exposure: None known.

Specific target organ toxicity – repeated exposure: None known.

Aspiration hazard: None known.

Chronic Effects (other targets e.g. developmental): None known.

POTENTIAL ADVERSE EFFECTS:

Inhalation: Adverse effects not known, but product may be harmful if inhaled.

Skin contact: Adverse effects not known, but product may be harmful if in contact with skin.

Eye contact: None known.

Ingestion: None known.

12. ECOLOGICAL INFORMATION

This product is considered a marine pollutant.

ECOTOXICITY DATA:

Fish:

LC₅₀ (96 h) Rainbow trout 65.7 mg/l

Daphnia:

LC₅₀ (48 h) 90 mg/l

Algae:

NOEC (96 h) Green algae 100 mg/l

Other aquatic

spp.:

LC₅₀ (14 d) *Lemna gibba* 0.0032 mg/l

Birds:

Acute oral LD₅₀ Bobwhite quail >2000 mg/kg

Dietary LC₅₀ (5 d) Mallard ducks > 5000 ppm

Bobwhite quail > 5000 ppm

Bees:
LD₅₀ contact > 76 mg/bee

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Worms:

LC₅₀ (14 d) Earthworms > 1000 mg/kg

Plants: Degraded rapidly in maize, DT₅₀ 1.5-4.5 d. Residues < 0.02 ppm in all crops. Hydrolysis of the sulfonylurea bridge to form the pyridine sulfonamide and pyrimidine amine, and hydroxylation on the pyrimidine ring, were the main metabolic pathways.

ENVIRONMENTAL EFFECTS:

Persistence and degradability: Soil DT₅₀ (aerobic) 26 d (pH 6.1, 5.1% o.m., 25°C).

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. 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 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.

14. TRANSPORT INFORMATION

UN Number: 3077
Road Transport ADR/IRD:
 Class: 9
 Packaging group: III
 UN Proper Shipping Name: Environmentally hazardous substance, Solid, N.O.S. (Nicosulfuron 750 g/kg)

Maritime Transport IMDG/IMO:
 Class: 9
 Packaging group: III
 UN Proper Shipping Name: Environmentally hazardous substance, Solid, N.O.S. (Nicosulfuron 750 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. (Nicosulfuron 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.

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 60, 300 g, 1, 5, 10, 12, 15, 20, 25 and 50 kg plastic containers and bags, labelled according to South African regulations and guidelines.

Additional H statements (formulants): None.

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.