

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe South Africa

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**Product Name:** PRELUDE 750 WG**Creation Date:** September 2013**Revision Date:** March 2021**24 Hr Emergency Number:** 082 771 2712**In case of poisoning:**

Poison Information Centre: 082 446 8946

Tygerberg Hospital: (021) 931 6129

Poison Emergency Enquiries (021) 689 5227

In case of Spillage:

HAZMAT: 0800 147 112

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS**Active ingredient**

N-[[[4,6-dimethoxy-2-pyrimidinyl]amino]carbonyl]-2-(ethylsulfonyl)imidazo[1,2-a]pyridine-3-sulfonamide; {Sulfosulfuron}

Composition

COMPONENT	CAS No.	% by weight (approximate)
Sulfosulfuron	141776-32-1	75
Other ingredients		25

The specific chemical identity is being withheld because it is trade secret information of Monsanto Company.

OSHA Status

This product is hazardous according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 3 - HAZARD IDENTIFICATION**Emergency overview****Appearance and odour (colour/form/odour):** Whitish / Granules, (free-flowing)**CAUTION!**

CAUSES EYE IRRITATION

Potential health effects**Likely routes of exposure**

Skin contact, eye contact, inhalation

Eye contact, short term

Not expected to produce significant adverse eye effects as contact with the granule is unlikely when recommended use instructions are followed.

Skin contact, short term

Not expected to produce significant adverse effects when recommended use instructions are followed.

Inhalation, short term

Not expected to produce significant adverse effects when recommended use instructions are followed.

Potential other effects

Risk of dust explosion.

Refer to section 11 for toxicological and section 12 for environmental information..

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SECTION 4 - FIRST AID MEASURES AND PRECAUTIONS

Eye contact

Immediately flush with plenty of water. If easy to do, remove contact lenses.

Skin contact

Wash affected skin with plenty of water. Use soap if available. Take off contaminated clothing, wristwatch, jewellery. Wash clothes and clean shoes before re-use.

Inhalation

Remove to fresh air.

Ingestion

Remove particles from mouth. Rinse mouth thoroughly with water. Immediately offer water to drink. Do NOT induce vomiting unless directed by medical personnel. If symptoms occur, get medical attention.

SECTION 5 - FIRE-FIGHTING MEASURES

Flash point

Not applicable.

Extinguishing media

Recommended: Water, foam, dry chemical, carbon dioxide (CO₂)

Unusual fire and explosion hazards

If this material is milled or the process generates fines, the fines could form an explosive mixture if dispersed in a sufficient quantity of air. Minimise use of water to prevent environmental contamination. Environmental precautions: see section 6.

Hazardous products of combustion

Carbon monoxide (CO), sulphur oxides (SO_x), hydrogen chloride (HCl), nitrogen oxides (NO_x), ammonia (NH₃)

Fire fighting equipment

Self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.

SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal precautions

Use personal protection recommended in section 8.

Environmental precautions

Minimise spread. Keep out of drains, sewers, ditches and water ways. Consult an expert immediately. Notify authorities.

Methods for cleaning up

Use vacuum equipment designed specifically for combustible dust. Dig up heavily contaminated soil. Collect in containers for disposal. Flush residues with small quantities of water. Minimise use of water to prevent environmental contamination.

Refer to section 13 for disposal of spilled material.

SECTION 7 - HANDLING AND STORAGE REQUIREMENTS

Good industrial practice in housekeeping and personal hygiene should be followed.

Handling

When using do not eat, drink or smoke. Wash hands thoroughly after handling or contact. Wash contaminated clothing before re-use. Thoroughly clean equipment after use. Emptied packages retain product residue and dust. Do not contaminate drains, sewers and water ways when disposing of equipment rinse water. Refer to section 13 for disposal of rinse water. Dust generated during handling and/or storage can form explosive mixtures in air. Observe all labelled safeguards until container is cleaned, reconditioned or destroyed.

Storage

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Maximum storage temperature: 54 °C Keep out of reach of children. Keep away from food, drink and animal feed. Keep only in the original container. Use appropriate containment to avoid environmental contamination. Keep container off wet floors. Minimum shelf life: 2 years. Follow all local/regional/national/international regulations

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

Airborne exposure limits

Components

Sulfosulfuron
Other ingredients

Exposure Guidelines

No specific occupational exposure limit has been established.
No specific occupational exposure limit has been established.

Engineering controls

No special requirement when used as recommended.

Eye protection

No special requirement when used as recommended.

Skin protection

If repeated or prolonged contact: Wear chemical resistant gloves.

Respiratory protection

No special requirement when used as recommended.

When recommended, consult manufacturer of personal protective equipment for the appropriate type of equipment for a given application.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

Colour/colour range:	Whitish
Form:	Granules, (free-flowing)
Flash point:	Not applicable.
Particle size:	> 99.5 % Mesh size 40
Density:	0.54 g/cm ³ ; (pour density)
Solubility:	Water: Soluble
pH:	4.9 @ 20 °C @ 10 g/l
Partition coefficient (log Pow):	< 1 (active ingredient)

SECTION 10 - STABILITY AND REACTIVITY

Stability

Stable under normal conditions of handling and storage.

Hazardous decomposition

Thermal decomposition: Hazardous products of combustion: see section 5.

Hazardous polymerization

Does not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

This section is intended for use by toxicologists and other health professionals.

Data obtained on similar products and on components are summarized below.

Similar formulation

Acute oral toxicity

Rat, LD₅₀: > 5,000 mg/kg body weight

Practically non-toxic. FIFRA category IV. No mortality.

Acute dermal toxicity

Rat, LD₅₀: > 5,000 mg/kg body weight

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Practically non-toxic. FIFRA category IV. No mortality.

Skin irritation**Rabbit, 6 animals, OECD 404 test:**

Days to heal: 3 Primary Irritation Index (PII): 0.9/8.0 Slight irritation. FIFRA category IV.

Eye irritation**Rabbit, 6 animals, OECD 405 test:**

Days to heal: 3 Slight irritation. FIFRA category III.

Acute inhalation toxicityRat, LC₅₀, 4 hours, dust: > 2.6 mg/L

Practically non-toxic. FIFRA category IV.

Skin sensitization**Guinea pig, maximisation test:**

Positive incidence: 0 %

Active ingredient**Mutagenicity****In vitro and in vivo mutagenicity test(s):**

Not mutagenic.

Repeated dose toxicity**Rat, oral, 90 days:**

NOAEL toxicity: 6,000 mg/kg diet Other effects: weight loss

Mouse, oral, 90 days:

NOAEL toxicity: > 7,000 mg/kg diet Other effects: none

Chronic effects/carcinogenicity**Mouse, oral, 18 months:**

NOEL tumour: 3,000 mg/kg diet NOAEL toxicity: 700 mg/kg diet Tumours: urinary bladder Target organs/systems: urinary bladder Other effects: histopathologic effects, blood biochemistry effects Tumours not relevant to man.

Rat, oral, 22 months:

NOEL tumour: 500 mg/kg diet NOAEL toxicity: 500 mg/kg diet Tumours: urinary bladder (carcinoma), urinary bladder (papilloma) Target organs/systems: urethra, urinary bladder, kidneys Other effects: organ weight change, histopathologic effects, increased mortality Tumours not relevant to man.

Toxicity to reproduction/fertility**Rat, oral, 2 generations:**

NOAEL toxicity: 5,000 mg/kg diet NOAEL reproduction: 20,000 mg/kg diet Target organs/systems in parents: kidneys Other effects in parents: weight loss, decrease of body weight gain, organ weight change Target organs/systems in pups: none Other effects in pups: none

Developmental toxicity/teratogenicity

Rat, oral, 6 - 15 days of gestation: NOAEL toxicity: 1,000 mg/kg body weight/day NOAEL development: 1,000 mg/kg body weight/day Target organs/systems in mother animal: none Other effects in mother animal: none Developmental effects: none No adverse treatment related effects in offspring.

Rabbit, oral, 7 - 18 days of gestation: NOAEL toxicity: 1,000 mg/kg body weight/day NOAEL development: 1,000 mg/kg body weight/day Target organs/systems in mother animal: none Other effects in mother animal: none Developmental effects: none**SECTION 12 - ECOLOGICAL INFORMATION**

This section is intended for use by ecotoxicologists and other environmental specialists.

Data obtained on product, similar products and on components are summarized below.

Arthropod toxicity**Honey bee (Apis mellifera):** Oral/contact, 48 hours, LD50: > 26.5 µg/beeSimilar formulation**Aquatic toxicity, fish**

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Rainbow trout (*Oncorhynchus mykiss*):Acute toxicity (limit test), 96 hours, static, LC₅₀: > 97 mg/L

No more than slightly toxic.

Aquatic toxicity, invertebrates**Water flea (*Daphnia magna*):**Acute toxicity (limit test), 48 hours, static, EC₅₀: > 101 mg/L Practically non-toxic.**Active ingredient****Aquatic toxicity, algae/aquatic plants****Green algae (*Selenastrum capricornutum*):**Acute toxicity, 72 hours, static, EC₅₀: 0.4 mg/L

Highly toxic.

Diatom (*Navicula pelliculosa*):Acute toxicity (limit test), 120 hours, static, EC₅₀: > 87 mg/L No more than slightly toxic.**Duckweed (*Lemna gibba*):** Acute toxicity, 14 days, static, EC₅₀: 1 µg/L Plant recovers when toxicant is removed.**Myriophyllum spicatum:** Microcosm, 21 days, static, EC₅₀: > 10 µg/L Plant recovers when toxicant is removed.**Glyceria maxima:** Microcosm, 70 days, static, EC₅₀: > 10 µg/L Plant recovers when toxicant is removed.**Lagarosiphon major:** Microcosm, 70 days, static, EC₅₀: > 10 µg/L Plant recovers when toxicant is removed.**Avian toxicity****Bobwhite quail (*Colinus virginianus*):** Dietary toxicity, 5 days, LC₅₀: > 5,620 mg/kg diet Practically non-toxic.**Mallard duck (*Anas platyrhynchos*):** Dietary toxicity, 5 days, LC₅₀: > 5,620 mg/kg diet Practically non-toxic.**Bobwhite quail (*Colinus virginianus*):** Acute oral toxicity, LD₅₀: > 2,250 mg/kg body weight Practically non-toxic.**Mallard duck (*Anas platyrhynchos*):** Acute oral toxicity, LD₅₀: > 2,250 mg/kg body weight Practically non-toxic.**Soil organism toxicity, invertebrates****Earthworm (*Eisenia foetida*):** Acute toxicity (limit test), 14 days, LC₅₀: > 848 mg/kg dry soil**Bioaccumulation**

No significant bioaccumulation is expected.

Dissipation:**Soil, field:**

Half life: 11 - 47 days

Water, aerobic:

Half life: 16 - 20 days

SECTION 13 - DISPOSAL CONSIDERATION**Product**

Keep out of drains, sewers, ditches and water ways. Recycle if appropriate facilities/equipment available. Burn in proper incinerator. Follow all local/regional/national/international regulations.

Container

See the individual container label for disposal information. Emptied packages retain product residue and dust. Observe all labelled safeguards until container is cleaned, reconditioned or destroyed. Empty packaging completely. Ensure packaging cannot be reused. Do NOT re-use containers. Store for collection by approved waste disposal service. Recycle if appropriate facilities/equipment available. Bury in approved landfill. Follow all local/regional/national/international regulations.

14. TRANSPORT INFORMATION**UN No.:** 3077**ADR**

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Sulfosulfuron)

Class: 9

Classification code: M7

Packing group: III

Label: 9

Hazard ID no: 90

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IMDG

Proper shipping name: Environmentally hazardous substance,solid,n.o.s.(Sulfosulfuron)

Class: 9

Label: 9 Marine Pollutant

Packing Group: III

ICAO/IATA

Proper shipping name: Environmentally hazardous substance,solid,n.o.s.(Sulfosulfuron)

Class : 9

Label: 9

Packing Group: III

15. REGULATORY INFORMATION

TSCA Inventory

Exempt

OSHA Hazardous Components

Surfactant(s)

SARA Title III Rules

Section 311/312 Hazard Categories Immediate

Section 302 Extremely Hazardous Substances Not applicable.

Section 313 Toxic Chemical(s) Not applicable.

CERCLA Reportable quantity

Not applicable.

16. OTHER INFORMATION

The information given here is not necessarily exhaustive but is representative of relevant, reliable data. Follow all local/regional/national/international regulations. Please consult supplier if further information is needed. In this document the British spelling was applied.