

VIXEN 480 SC

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: VIXEN 480 SC
Other identifier: Sulfentrazone 480 SC
Recommended use: Herbicide
Restrictions on use: Agriculture

Registration Holder: Meridian Agrochemical Company (Pty) Ltd
Co. Reg. No.: 2000/010819/07
 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:
 (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		
Dermal	Acute Toxicity 5 Skin irritation 3	H313 H316
Respiratory Sensitization	Respiratory Sensitization 1	H334
Specific Target Organ Toxicity Repeated Exposure	STOT RE 2	H373
Environment		
Aquatic Chronic	Aquatic chronic 2	H411

The most important adverse effects:
Physicochemical effects: None known.
Human health effects:
 May be harmful in contact with skin.
 Causes mild skin irritation.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 May cause damage to organs through prolonged or repeated exposure.
Label elements:



Signal word: Danger.
Hazard statements:
 H313: May be harmful in contact with.
 H316: Causes mild skin irritation.
 H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H373: May cause damage to organs through prolonged or repeated exposure.
 H411 toxic to aquatic life with long lasting effects.
Precautionary statements:
 P260: Do not breathe fume, mist, vapours and spray.
 P273: Avoid release to the environment.
 P284: In case of inadequate ventilation wear respiratory protection.
 P302+P332+P317: IF ON SKIN or skin irritation occurs: get medical help.
 P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P319: Get medical help if you feel unwell.
 P342+P316: If experiencing respiratory symptoms: Get emergency medical help immediately.
 P391: Collect spillage.
 P501: Dispose of content/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 5.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture.

Composition:

Chemical Name	CAS	Conc. (m/v%)	Classification EC 1272/2008
Sulfentrazone	12283 6-35-5	48%	Acute Toxicity 4 (H332) STOT RE 2 (H373) Aquatic chronic 2 (H411)
MEG	107- 21-1	<5%	Acute Toxicity 4 (H302)
Morwet EFW	N/A	<5%	Skin irritation 2 (H315) Eye irritation 2 (H319) Aquatic acute 2 (H401)

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Morwet D-425	N/A	<5%	Respiratory sensitization (H334) 1 Skin irritation (H315) 2 Eye irritation (H320) 2B
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all personnel downwind of the fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Remain upwind of fire. 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.

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.

Inhalation: Remove person from contaminated area to fresh air and assist breathing as needed. **If experiencing respiratory symptoms: Get emergency medical help immediately.**

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 occurs.**

Eyes: Flush eyes with clean water for at least 15 – 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes 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 in contact with skin. Causes mild skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Anticipated delayed effects: May cause damage to organs through prolonged or repeated exposure.

Most important symptoms/effects: Effects from overexposure resulting from inhaling this product. Symptoms of overexposure include convulsions, tremors, increased sensitivity to touch and sound, difficulty breathing, decreased locomotion, tearing, nasal discharge and unco-ordination.

Advice to physician: This product has a low oral, dermal and inhalation toxicity. This product is slightly irritating to the skin and eyes. Consideration should be given to gastric lavage with an endotracheal tube in place. The treatment is otherwise controlled by removal of exposure, followed by symptomatic and supportive care.

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

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: May cause allergy or asthma symptoms or breathing difficulties if inhaled. Avoid contact with skin. Do not breathe in spray mist or fumes. Ventilate area of spill or leak, 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 and may cause long lasting adverse effects. 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 by diking area with sand or earth.

Methods and Materials for Clean-up: Cover contained spill with an inert absorbent material such as sand, vermiculite, earth or other appropriate material. Vacuum, scoop, or sweep up material and place the material into a clean, dry, sealable container. 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. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. See section 13 for disposal considerations

7. HANDLING AND STORAGE

Handling:

Precautions for safe handling: May cause allergy or asthma symptoms or breathing difficulties if inhaled. Avoid contact with skin. Do not breathe in spray mist or fumes. Ensure adequate ventilation during handling and use. Do not handle broken packages without protective equipment. Immediately clean up spills that occur during

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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 again.

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: non-fluorinated plastic bottle.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentration: No occupational exposure limits have been determined for the significant ingredients in this product.

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:

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 with cartridges / canisters approved for organic vapours.

Hand Protection: The use of chemically protective impervious 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: Employees must wear appropriate protective impervious clothing, rubber 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 mixture; the employer should provide an eyewash fountain or

appropriate alternative within the immediate work area for emergency use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Tan to cream liquid.

Odour: Characteristic odour.

pH (1 % aqueous dilution): 5.5 – 7.5.

Melting point: Not available.

Freezing Point: Not available.

Boiling Point: Not available.

Flash Point: >94°C (Tag closed cup).

Flammability: Not flammable.

Upper/lower explosion limits: Not explosive.

Vapour Pressure (mm Hg): Not available.

Relative Vapour Density: Not available.

Density/Relative density: Not available.

Solubility: Suspends in water.

n-Octanol/water partition coefficient: Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

Viscosity: Not available.

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: Unlikely to 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

Calculated according to GHS.

Oral LD₅₀ (24 h) >5000 mg/kg (rat).

Dermal LD₅₀ (24 h) >2 000 mg/kg (rat).

Inhalation LC₅₀ (4 h) >5 mg/l (rat).

Skin Irritation/Corrosion: Causes mild skin irritation.

Eye Damage/Irritation: Not classified.

Skin Sensitization: Not classified.

Respiratory Sensitization: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Reproductive cell mutagenicity: Not classified.

Carcinogenicity: Not classified.

Reproductive toxicity: Not classified.

Specific target organ toxicity – single exposure: Not classified.

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Specific target organ toxicity – repeated exposure:
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Aspiration hazard: Not classified.

Chronic Effects: Not available.

POTENTIAL ADVERSE EFFECTS:

Inhalation: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin contact: May be harmful in contact with skin. Causes mild skin irritation.

Eye contact: Not classified.

Ingestion: Do not ingest.

12. ECOLOGICAL INFORMATION

This product is expected to be very toxic to aquatic life.

ECOTOXICITY DATA:

Sulfentrazone

Fish:

LC ₅₀ (96 h)	Rainbow trout	>130 mg/l
	Bluegill sunfish	93.8 mg/l

Daphnia:

LC ₅₀ (48 h)		60.4 mg/l
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Algae:

EC ₅₀	Blue-green algae	0.0329 mg/l
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Birds:

Acute oral LD ₅₀	Mallard ducks	>2250 mg/kg
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Dietary (8d)	LC ₅₀	ducks and quail	>5620 mg/kg diet
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Bees:		>25 µg/bee
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ENVIRONMENTAL EFFECTS

Based on information for the active ingredient

Plants: In soybeans, over 95% of the parent sulfentrazone is metabolised to the ring-hydroxymethyl analogue within 12 h. This hydroxymethyl analogue is also conjugated to form glucosides or converted to sulfentrazone-carboxylic acid.

Persistence and degradability: Stable in soil (DT50 18 mo). In water, stable to hydrolysis (pH 5–9), but readily undergoes photolysis (DT50 <0.5 d).

Bio-accumulative potential: In rats, nearly all of administered sulfentrazone is rapidly absorbed and

excreted in the urine within 72 h. Low potential to bioaccumulate.

Mobility in soil: Low affinity for organic matter (K_{oc} 43) but is mobile only in soils with high sand content.

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: Emptied containers retain product residues. Do not re-use the empty container for any other purpose. Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

14. TRANSPORT INFORMATION

UN NUMBER: 3082

Road Transport ADR/RID:

Class: 9
 Packaging group: III
 Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (sulfentrazone 480 g/l)

Maritime Transport IMDG/IMO:

Class: 9
 Packaging group: III
 Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (sulfentrazone 480 g/l)

Marine Pollutant: Yes

Air Transport IATA/ICAO:

Class: 9
 Packaging group: III
 Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (sulfentrazone 480 g/l)

Special / Environmental Precautions: Wedge drums tightly to avoid movement.

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Transport in bulk: Refer to MARPOL 73/78, Annex II and the IBC code.

END OF DOCUMENT

15. REGULATORY INFORMATION

Safety, health and environmental regulations / legislation for the mixture:

OHSA 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

Compiled: August 2013
Reviewed: November 2023
Revision no.: (2)
Next revision date: November 2028

For detailed information on revisions, contact the Registration holder.

16. OTHER INFORMATION

Packaging: Packed in 50, 250, 500 millilitres and in 1, 2, 5, 10, 20, 50 and 200 litres non-fluorinated plastic bottle., labelled according to South African regulations and guidelines.

Other hazard statements, abbreviations and explanations:

H302: Harmful if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H320: Causes eye irritation.

H332: Harmful if inhaled.

H401: Toxic to aquatic life.

IATA: International Air Transport Association.

IBC: International Bulk Chemical.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Dangerous Goods

IMO: International Maritime Organization.

LD₅₀ value: The median lethal dose or the amount of a toxic agent that is sufficient to kill 50 percent of a population within a certain period of time.

OEL/RL: Occupational exposure limit-recommended limit.

PEL: Permissible Exposure Limits.

TWA: Time-weighted average – The average exposure over a specified period, usually a nominal eight hours.

ST/STEL: Short-term exposure limits.

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.