

TRIPYR 480 EC

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: TRIPYR 480 EC
Other identifier: Triclopyr Butoxy Ethyl Ester
Recommended use: Herbicide
Restrictions on use: Agriculture

Supplier: Villa Crop Protection (Pty) Ltd.
Co. Reg. No.: 1992/002474/07
PO Box 10413
Aston Manor, 1630, 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
Physical		
Flammable	Flam. Liq. 4	H227
Health		
Oral	Acute Tox.4	H302
Aspiration	Asp. Tox. 4	H304
Dermal	Acute Tox. 5 Skin Irrit. 3 Skin Sens.1	H313 H316 H317
Eye	Eye Dam. 1	H318
Inhalation	Acute Tox. 3	H331
Single Target Organ Toxicity – Repeated Exposure	STOT RE 2	H373
Environment		
Aquatic acute	Aquatic acute 1	H400
Aquatic chronic	Aquatic chronic 1	H410

The most important adverse effects:

Physiochemical effects:

Combustible liquid (Flam. Liq. 4).

Human health effects:

Harmful if swallowed (Acute Tox. 4).

May be fatal if swallowed and enters airways

(Asp. Tox. 1).

May be harmful in contact with skin (Acute Tox. 5).

Causes mild skin irritation (Skin Irrit. 3).

May cause an allergic skin reaction (Skin Sens. 1).

Causes serious eye damage (Eye Dam. 1).

Toxic if inhaled (Acute Tox. 3).

May cause damage to organs through prolonged or repeated exposure (STOT RE 2).

Label elements:



Signal word: Danger.

Hazard statements:

H227: Combustible liquid.

H302: Harmful if swallowed.

H304: May be fatal if swallowed and enters airways.

H313: May be harmful in contact with skin.

H316: Causes mild skin irritation.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H331: Toxic if inhaled.

H373: May cause damage to organs through prolonged or repeated exposure.

H400: Very toxic to aquatic life.

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

Precautionary statements:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260+P261: Avoid breathing dust, fumes, mists, gas, vapours or spray.

P264+P265: Wash hands and face thoroughly after handling. Do not touch eyes.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+P317: IF SWALLOWED: Get medical help.

P302+P317+P352: IF ON SKIN: Wash with plenty of water and non-abrasive soap. Get medical help.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P354+P338: IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P316: Get emergency medical help immediately.
P319: Get medical help if you feel unwell.
P321: Refer to label for specific treatment.
P330: Rinse mouth.
P331: Do NOT induce vomiting.
P332+P333+P317: If skin irritation or rash occurs: Get medical help.
P370+P378: In case of fire: Use carbon dioxide, dry powder or alcohol-resistant foam to extinguish.
P391: Collect spillage.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.
P501: Dispose of content/container to suitable landfill in accordance with local regulations.
Other hazards: None known.
Toxicity: Classification according to GHS: Category 3.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture.

Composition:

Chemical Name	CAS	Conc. (m/v %)	Classification 1272/2008	EC
Triclopyr butoxy ethyl ester	64700-56-7	49.50	Acute Tox. 4 (H302) Skin Sens. 1 (H317) STOT RE 2 (H373) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	
Calcium dodecyl benzene sulfonate	26264-06-2	< 10	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 4 (H413)	
Polyoxyethylene alkyl ether	9002-92-0	< 10	Acute Tox. 4 (H302) Eye Irrit. 2 (H319) Aquatic Chronic 3 (H412)	
Phenylethyl phenol polyoxyethylene ether	99734-09-5	< 10	Aquatic Chronic 3 (H412)	
C9-Light solvent naphtha	64742-94-5	< 50	Asp. Tox. 1 (H304)	

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.

Symptoms of human poisoning: Inert is harmful by inhalation and if swallowed. Irritating to eyes, respiratory system and skin. May affect central nervous system. Ingestion may cause gastric disturbances.

Inhalation: If vapours or mists have been inhaled, move victim to fresh air and remove source of contamination if safe to do so. The patient should be kept under observation. **Obtain medical attention if symptoms persist.**

Skin: 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.**

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 immediately.**

Ingestion: Do not induce vomiting, due to aromatic solvent. **Seek medical attention immediately.** Do not give anything by mouth to an unconscious person. Obtain medical attention if the patient feels unwell. Administer oxygen if breathing is difficult. If breathing has stopped, give artificial respiration.

Anticipated acute effects: Harmful if swallowed. May be fatal if swallowed and enters airways. May be harmful in contact with skin. Causes mild skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Toxic if inhaled.

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

Most important symptoms/effects: None known.

Advice to physician: There is no specific antidote available. Keep patient prone and quiet. Start artificial respiration immediately, if patient is breathing never give anything by mouth to an unconscious person. Treat symptomatically and supportively.

5. FIRE-FIGHTING MEASURES

Fire hazard: Combustible liquid with flash point of 62 °C

Suitable Extinguishing Media: 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.

Unsuitable Extinguishing Media: Use as little water as possible. Solid stream may cause spreading.

Specific hazards: In case of fire and/or explosion do not breath fumes. Vapour may cause drowsiness and dizziness.

Special Fire Fighting Procedures: Remove spectators from surrounding area. Isolate the fire area and evacuate

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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 bunker gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with eyes and skin. **TRIPYR 480 EC** causes serious eye damage and mild skin irritation. 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. Keep spectators away and upwind.

Emergency procedures: Alert firefighting personnel, evacuate unprotected personnel and animals.

Environmental Precautions: Prevent spilled product from entering sewers, waterways, or ground water. **TRIPYR 480 EC** is classified to be very toxic to aquatic organisms with long-term adverse effects in the aquatic environment. Any spillages or uncontrolled discharges into water courses 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, earth or silica gel.

Methods and Materials for Clean-up: Cover contained spill with an inert absorbent material such as sand, earth or other appropriate non-combustible 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 (i.e., organic solvent, detergent bleach or caustic). Add the solution to the drums already collected. Open burning or dumping of this material is prohibited. Do not get water inside containers. See section 13 for disposal considerations.

7. HANDLING AND STORAGE

Handling:

Precautions for safe handling: Avoid contact with eyes and skin. Ensure adequate ventilation during handling

and use. Do not handle broken containers without protective equipment. Immediately clean up spills that occur during handling. 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. Keep containers tightly 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 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. Avoid cross contamination with other pesticides and fertilisers.

Incompatible substances and mixtures: Refer to product label.

Packaging material: Fluorinated plastic containers.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentration: No occupational exposure limits has 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 OSHA PELs 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: Wear an organic cartridge respirator suitable for protection from mists/ vapours of pesticides if product will be used in an area that is not well ventilated.

Hand Protection: Employee must wear appropriate chemically resistant gloves e.g., nitrile rubber gloves to prevent contact with this mixture.

Eye Protection: Wear a face shield when handling the concentrate and when applying the product. The use of safety goggles is recommended if a face shield is not used.

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Skin and Body Protection: The use of protective (impervious) clothing e.g., coveralls is recommended to prevent skin contact with this mixture.

Emergency eyewash: Where there is any possibility that an employee's eyes may be exposed to this mixture; 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: Amber liquid.

Odour: Aromatic.

pH: 6.3.

Melting point: Not available.

Freezing Point: Not available.

Boiling Point: Not available.

Flash Point: 62 °C.

Flammability: Combustible liquid.

Upper/lower explosion limits: Not available.

Vapour Pressure (mm Hg): Not available.

Relative Vapour Density: Not available.

Relative density: 1.0 g/ml.

Solubility: Miscible 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 2 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: This product is incompatible with strong oxidizing agents.

Conditions to Avoid: None known.

Incompatible Materials: None known.

Hazardous Decomposition Products: Thermal decomposition may emit toxic fumes of CO₂, NO and smoke. Occasionally hydrogen cyanide gas in reduced atmospheres. Nitrogen and its compounds sometimes oxides of nitrogen. Hydrogen chloride gas and other compound of chlorine. Hydrogen fluoride gas, other compound of fluorine and water.

Hazardous Polymerisation: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Calculated according to GHS:

Oral LD₅₀ (24h) 1088.55 mg/kg.

Dermal LD₅₀ (24 h) 2105.26 mg/kg

Inhalation LC₅₀ (4 h) 0.87 mg/l.

Skin Irritation/Corrosion: Causes mild skin irritation.

Eye Damage/Irritation: Causes serious eye damage.

Skin Sensitization: May cause an allergic skin reaction.

Respiratory Sensitization: Not classified.

Reproductive cell mutagenicity: Not classified.

Carcinogenicity: Not classified.

Reproductive toxicity: Not classified.

Specific target organ toxicity – single exposure: Not classified.

Specific target organ toxicity – repeated exposure: May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: May be fatal if swallowed and enters airways.

Chronic Effects: None known.

POTENTIAL ADVERSE EFFECTS:

Inhalation: This product is toxic if inhaled.

Skin contact: This product causes mild skin irritation and may cause an allergic skin reaction.

Eye contact: Due to inertness this product causes serious eye damage.

Ingestion: This product is harmful if swallowed.

12. ECOLOGICAL INFORMATION

This product is considered a marine pollutant.

ECOTOXICITY DATA: Active ingredient

Triclopyr butotyl:

Birds:

LD ₅₀	Mallard ducks	1698 mg/kg
	Bobwhite quail	2935 mg/kg

Fish:

LC ₅₀ (96 h)	Rainbow trout	> solubility limit
	Bluegill sunfish	

Daphnia:

LC ₅₀		> solubility limit
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Bees:

(Not toxic to bees)

LD ₅₀ (Contact and oral)		> 100 µg/bee
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Earthworms:

LC ₅₀		> 1000 mg/kg
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ENVIRONMENTAL EFFECTS:

Triclopyr butotyl:

Animals: In mammals, following oral administration, excretion is primarily via the urine as the unchanged compound.

Plants: In plants the main metabolite is 3,5,6-trichloro-2-methoxypyridine.

Persistence and degradability: Fairly rapid degradation in soil by microbial activity. DT₅₀ time for 50% loss/half-life is 46 days, depending on soil and climatic conditions. The major degradation product is

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3, 5, 6-trichloro-2-pyridinol which has a soil DT₅₀ time for 50% loss/half-life of 30 to 90 days, with a smaller amount of 3,5,6-trichloro-2-methoxypyridine.

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. The product may be taken to a registered waste disposal site or incineration plant. Where possible, recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

Container: Emptied containers retain vapour and product residues. Do not re-use the empty container for any other purpose. **TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS:** 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. Observe all labelled safeguards until container is destroyed.

14. TRANSPORT INFORMATION

UN Number: 2902
Road Transport ADR/IRD:
Class: 6.1
Packaging group: II
UN Proper Shipping Name: PESTICIDE LIQUID, TOXIC, N.O.S. (Triclopyr butotyl 480 g/l)

Maritime Transport IMDG/IMO:
Class: 6.1
Packaging group: II
UN Proper Shipping Name: PESTICIDE LIQUID, TOXIC, N.O.S. (Triclopyr butotyl 480 g/l)

Marine Pollutant (Y/N): Yes, Considered a marine pollutant.

Air transport IATA/ICAO:
Class: 6.1

Packaging group: II
UN Proper Shipping Name: PESTICIDE LIQUID, TOXIC, N.O.S. (Triclopyr butotyl 480 g/l)

Special/Environmental Precautions: None known.

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:

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

16. OTHER INFORMATION

Packaging: Packed in 500ml 1, 2, 2.5, 5, 10, 15, 20, 25 and 50 litres fluorinated plastic containers and labelled according to the South African regulations and guidelines.

Other hazard statements, abbreviations and explanation:

H319: Causes serious eye irritation.

H412: Harmful to aquatic life with long lasting effects.

H413: May cause long lasting harmful effects 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.

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.

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END OF DOCUMENT

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For detailed information on revisions, contact the Registration holder.