

Safety Data Sheet (SDS) Trion 480

According to UN GHS 8th Ed
Revision Date: 19/04/2023

First print date: 19/04/2023
Version: 1.1

SECTION 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING

Product identifier:

Identification as on the label/Trade name: Trion 480

Common name: Mesotrione 480 g/L SC

Relevant identification uses of the substance and uses advised against:

Identified uses: Herbicide

Uses advised against: Use only as directed.

Details of the supplier of the Safety Data Sheet:

Enviro Bio-Chem (Pty) Ltd, 44 Kerk Street,
Lichtenburg, North West, South Africa, 2740

Details of the Registration Holder:

Enviro Crop Protection, 44 Kerk Street,
Lichtenburg, North West, South Africa, 2740

Contact Details:

Telephone: +27 87 231 7261

Fax: 086 541 7948

Website: www.envirobiochem.co.za

Emergency telephone numbers:

24 Hour Emergency Number: Bateleur: +27 83 123 3911

Griffon Poison Information Centre: +27 82 446 8946

Poisons Information Helpline: 0861 555 777

Tygerberg Hospital: +27 21 931 6129

SECTION 2. HAZARD IDENTIFICATION

Classification of the substances or mixture

The mixture is classified according to Regulation (EC) No 1272/2008 EU-GHS/CLP

Hazard classes/Hazard categories	Hazard statement
Acute Oral Toxicity (Category 5)	H303
Acute Dermal Toxicity (Category 5)	H313
Acute Inhalation Toxicity (Category 4)	H332
Skin Corrosion/Irritation (Category 3)	H316
Serious Eye Damage/Irritation (Category 2)	H319
Skin sensitization (Category 1)	H317
Aquatic Toxicity Acute (Category 1)	H400
Aquatic Toxicity Chronic (Category 1)	H410

For full text of H statements see section 16

The most important adverse effects

The most important adverse physicochemical effects: None known

The most important adverse human health effects: Causes mild skin irritation, Causes serious eye irritation, May cause an allergic skin reaction, Very toxic to aquatic life with long lasting effects.

Label elements



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Hazard pictograms:

Signal Word: Warning

Hazard Statements:

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Precautionary Statements:

P261	Avoid breathing mists, vapours or spray.
P264	Wash hands, forearms, and face thoroughly after handling
P272	Contaminated work clothing should not be allowed out of the workplace
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
P304+P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. to do – continue rinsing.
P321	Specific treatment (see it on this label).
P332 + P317	If skin irritation occurs: Get medical help
P333 + P317	If skin irritation or rash occurs: Get medical help
P362 + P364	Take off contaminated clothing and wash it before reuse
P391	Collect spillage
P501	Dispose of contents/container in accordance with local/regional/ national regulations

Other hazards: None known

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients:

Substance name (IUPAC)	CAS Number.	Concentration % by weight
Mesotrione	104206-82-8	480 G/L
Others	/	Up to 1L

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations

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applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

SECTION 4. FIRST AID MEASURES

Description of first aid measures:

In case of inhalation: If inhaled, remove from contaminated area to fresh air and assist breathing as required. Seek medical attention if irritation occurs or if patient feels unwell after inhalation.

In case of skin contact: In case of contact, 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.

In case of eye contact: 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.

In case of ingestion: Wash out mouth with water if the patient is alert and conscious. Do NOT induce vomiting . If vomiting occurs spontaneously, keep head below hips to avoid aspiration. Keep patient at rest and transport to nearest medical facility for further treatment. attention. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar,tie, belt, or waistband.

Most important symptoms and effects, both acute and delayed:

Anticipated acute effects:

Inhalation: Harmful if inhaled

Ingestions: May be harmful if swallowed.

Skin contact: Irritant, may cause an allergic skin reaction.

Eye contact: Causes serious eye damage

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

Most important symptoms/effects: None known

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically and supportively

SECTION 5. FIRE FIGHTING MEASURES

Extinguisher media:

Suitable extinguisher media: Foam. Dry powder. Carbon dioxide. Water spray.

Small Fire: Extinguish small fires with carbon dioxide, dry powder, or alcohol-resistant foam.

Large Fire: Water spray can be used for larger fires or cooling of unaffected stock but avoid the accumulation of polluted run-off from the site. Use as little water as possible.

Unsuitable extinguishing media: Do not use high volume water jet, due to contamination risk.

Special hazards arising from the mixture:

Hazardous decomposition products in case of fire: Refer to Section 10: Stability and Reactivity.

Advice for fire-fighters:

Avoid inhaling hazardous vapours. Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Use an approved/certified respirator or equivalent.

Contain fire control agents for later disposal according to Section 13.

Water can be used to cool unaffected containers.

SECTION 6. ACCIDENTAL RELEASE

Personal precautions, protective equipment, and emergency procedures:

Personal precautions: Avoid contact with skin and eyes. Do not breathe in spray mist / fumes / vapours.

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Ventilate area of spill or leak, especially in contained areas.

For emergency responders: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Use an approved/certified respirator or equivalent. Avoid contact with eyes and skin. Do not breathe in fumes. Refer to section 8 for recommended personal protective equipment. Evacuate unnecessary personnel.

Emergency procedure: Alert emergency response personnel. Evacuate unprotected spectators and animals.

Environmental precautions:

Stop leak if without risk. Do not touch spilled material. Use a light water spray to reduce vapours.

Prevent entry into drains, watercourses, or confined areas; dike if needed. This product is classified as very toxic to aquatic organisms and will cause long-term adverse effects in the aquatic environment.

If the product contaminates public water, inform appropriate authorities immediately in accordance with local regulations.

Methods for containment and cleaning up:

For small spills Contain spilled material by diking if possible. Absorb with materials such as: sand, earth, vermiculite, or diatomaceous earth. Collect in suitable and properly labelled containers.

For large spills Prevent entry into drains, watercourses, or confined areas. 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 spill 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 consideration

Reference to other sections:

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for information on disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

May be harmful if swallowed. Avoid contact with eyes and skin. Use with adequate ventilation. Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

Protective measures: Observe directions on label and instructions for use.

Advice on general occupational hygiene: Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities:

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

Specific end uses:

Use as directed. Use original container.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

Occupational exposure limits (OEL): No information available.

Biological exposure indices (BEI): No information available.

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Additional exposure limits under the conditions of use: No information available

Exposure control:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. A Risk Assessment should be conducted before handling is to commence to determine specific exposure control.

Appropriate engineering controls: Use outdoors in a well-ventilated area. Provide exhaust ventilation or other engineering controls. Ensure that control systems are properly designed. Comply with occupational safety, environmental, fire and other applicable regulations. Ensure that eyewashstations and safety showers are proximal to the work-station location.

Hygiene measures: Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Eye/face protection: Avoid contact with eyes. Wear a full-face shield when handling the product or spraying. The use of safety glasses with side shields (or goggles) are recommended if a face shield is not used. This product causes serious eye damage

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, Polyvinyl alcohol, Polyvinyl chloride.

Body protection: Appropriate impervious clothing is required to prevent skin contact with the product.

Respiratory protection: Use only in well ventilated areas. Under normal handling conditions no respiratory protection is required. If handling area is not well-ventilated use a NIOSH approved, air purifying respirator with cartridges / canisters approved for organic vapours.

Environmental exposure controls: Prevent product from entry into sewers and water courses

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Solution
Colour	Off White
Odour	No data available
Odour threshold	No data available
pH	4.0-7.0
Melting point / freezing point (°C)	165°C for Mesotrione
Boiling point (°C)	No data available
Flash point (°C)	Does not flash
Evaporation rate	No data available
Flammability	No data available
Upper /lower flammability limits	Not explosive
Vapour pressure	No data available
Vapour density	No data available
Relative density (25°C) g/cm ³	1.125 g/ml
Water solubility (g/l) at 20°C	No data available
Partition coefficient : n-octanol/water	No data available
Auto-ignition temperature (°C)	No data available
Decomposition temperature (°C)	No data available
Viscosity, dynamic (mPa s)	No data available
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	No data available

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SECTION 10. STABILITY AND REACTIVITY

Reactivity: None known

Chemical stability:

Relatively stable in neutral, weakly acidic and weakly alkaline media

Possibility of hazardous reactions: Unlikely to occur

Conditions to avoid: Extreme heat or exposure to flames

Incompatible materials:

Compatible with most herbicide formulations except very strong acid/alkaline formulations

Hazardous decomposition products: None

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution: No data available

Information on toxicological effects:

Assessment of acute toxicity:

The product has been tested. The data reported is for the main ingredients in the mixture.

Mesotrione Cas No: 104206-82-8	
Acute toxicity:	
Acute Oral LD50 (rat - male)	4220.1 mg/kg mg/kg
Acute Dermal LD50 (rat):	4247.3mg/kg
Acute Inhalation LC50 - 4 h (rat)	>3.00mg/l
Skin irritation/ corrosion (rabbits)	Mild skin irritant
Eye damage / irritation (rabbits)	Mild eye irritant
Respiratory or skin sensitization	Mild skin sensitiser
Germ cell mutagenicity	No data available
Carcinogenicity	No data available
Reproductive toxicity	No data available
Specific Target Organ Toxicity STOT single exposure	No data available
Specific Target Organ Toxicity STOT repeated exposure	No data available
Aspiration hazard	No data available

Additional Information:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12. ECOLOGICAL INFORMATION

Mesotrione Cas No: 104206-82-8	
Toxicity	
Birds Acute oral LD ₅₀ Dietary LC ₅₀ (8d)	>2150mg/kg Mallard ducks and Bobwhite quail >1000 mg/kg Mallard ducks and Bobwhite quail
Aquatic Toxicity Fish LC ₅₀ (96 hr) Aquatic Toxicity Daphnia LC ₅₀ (48 hr) Algae EC ₅₀ (72h) Bee Toxicity LC ₅₀ (24h)	rainbow trout is >120 mg/L ,bluegill sunfish is >120 mg/L >900 mg/L 4.5 mg (<i>Scenedesmus subspicatus</i>) > 11µg/ bee (Oral and contact)
Metabolism	No data available
Persistence and degradability	No data available

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Bioaccumulation potential	Not determined
Mobility in soil	No data available

SECTION 13. DISPOSAL CONSIDERATIONS
Waste treatment methods:
Product:

Keep out of drains, sewers, ditches, and waterways. Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be re-used or reprocessed. Refer to container label for disposal information. Treat as hazardous waste and dispose of in accordance with local/ regional/ national/ international regulations.

Container:

Refer to container label for disposal information. Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is cleaned, reconditioned, or destroyed. Rinse empty container three times with a volume of water equal to at least one tenth of that of the container. Pour rinse water into spray tank. Dispose of as hazardous waste. not contaminate water when disposing of rinse water. Dispose of using an approved waste disposal service provider. Follow all local/ regional/ national/ international regulations.

SECTION 14. TRANSPORT INFORMATION

UN Number	3082
UN proper shipping name	Environmentally Hazardous Substance; Liquid; N.O.S. (Mesotrione 480 g/l)
Transport hazard class	9
Packaging group	III
Marine pollutant	Yes

SECTION 15. REGULATORY INFORMATION
Safety, health, and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993. Regulation for Hazardous Chemical Agents, 2021. UN Recommendations on the Transport of Dangerous Goods Model Regulations Rev. 21 (2019), Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev 8, 2019.

Relevant information regarding restrictions:

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations:

National Road Traffic Act, 1996 (ACT NO. 93 of 1996).

SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes.

National Environmental Management Waste Act 59 of 2008.

Act 36 of 1947 of the Republic of South Africa. This product is registered under it is a violation of South African law to use this product in any manner inconsistent with its approved labelling. Read and follow all label directions

Chemical Safety Assessment carried out? No

SECTION 16. OTHER INFORMATION
Indication of changes:

Classification according to SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]

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GHS aligned – all sections

Relevant H statements (number and full text):

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H332	Harmful if inhaled
H316	Causes mild skin irritation
H319	Causes serious eye irritation
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Training instructions:

Use as indicated on the label, special training may be required for application.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

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.