

# ViRoAXE

## SAFETY DATA SHEET

### 1. PRODUCT & COMPANY IDENTIFICATION

**Product Name:** ViRoAXE  
**Pesticide Classification:** Herbicide  
**UN No.:** 3082

#### Supplier

Enviro Bio-Chem (Pty) Ltd  
Co. Reg. No.: 2013/194774/07  
44 Kerk Street, Lichtenburg  
North West, South Africa 2740

#### Registration Holder

Enviro Industries (Pty) Ltd t/a Enviro Weed Control Systems  
Co. Reg. No.: 1999/006136/07  
44 Kerk Street, Lichtenburg  
North West, South Africa 2740

**Telephone:** +27 87 231 7261  
**Fax:** 086 541 7948  
**Website:** [www.envirobiochem.co.za](http://www.envirobiochem.co.za)

**24 Hr Emergency Number:** Bateleur: +27 83 123 3911

#### **In case of Poisoning:**

Poison Information Centre: +27 82 446 8946  
Tygerberg Hospital: (+27 21) 931 6129  
Poison Emergency Enquiries: (+27 21) 689 5227

**Common Name:** Triclopyr 480g/l EC  
**Chemical Name:** 3,5,6-trichloro-2- pyridyloxyacetic acid (IUPAC)  
**Empirical formula:** C<sub>7</sub>H<sub>4</sub>Cl<sub>3</sub>NO<sub>3</sub>  
**CAS No.:** 64700-56-7  
**RSA Reg. No.:** L6663 Act 36 of 1947  
**Namibia Reg. No.:** N-AR 0702

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### 2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient Name</u>	<u>Concentration</u>
Triclopyr (pyridyloxy compound as butoxyl ethyl ester)	480 g/l
Solvent plus Inert Ingredients	Balance

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### 3. HAZARD IDENTIFICATION

**Hazard Class:** WHO Class II -Moderately hazardous.

**Main Hazard:** Moderately hazardous. May cause irritation to the skin and eyes.

**Flammability:** Flammable

**Biological Hazard:** Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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### 4. FIRST AID MEASURES AND PRECAUTIONS

If poisoning is suspected, do not wait for symptoms to develop. Contact a physician, the nearest hospital, or the nearest Poison Control Centre.

**Symptoms of Human Poisoning:** No signs and symptoms of poisoning are known or expected in humans.

#### First Aid Measures:

**Skin Contact:** Remove contaminated clothing and wash before reuse. Wash affected skin areas with fresh running water and soap. Treat symptomatically. Seek medical attention if symptoms persist.

**Eye Contact:** Flush eyes immediately with large amounts of gently flowing cold water or normal saline solution, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15 to 20 minutes). If irritation persists, get medical attention.

**Ingestion:** Have victim rinse mouth thoroughly with water. Do not induce vomiting, due to the aromatic solvent. Seek medical advice immediately. If the person is alert and respiration is not depressed, give large quantity of water to drink. Never give anything by mouth to an unconscious person. Establish and maintain airway. Treat respiratory difficulty with artificial respiration and oxygen. Qualified medical personnel should perform administration of gastric lavage or oxygen. Seek medical advice immediately.

**Inhalation:** Immediately remove source of contamination or move victim to fresh air. If breathing has stopped, perform artificial respiration and administer oxygen. Avoid mouth-to-mouth resuscitation. Keep person warm and at rest. Treat symptomatically and supportively as and when required. Seek medical advice immediately.

**Advise to Physician:** Keep patient prone and quiet. Start artificial respiration immediately if patient is breathing. Never give anything by mouth to an unconscious person.

**Antidote:** There is no specific antidote for poisoning with this product.

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### 5. FIRE FIGHTING MEASURES

**Flammability:** Flammable.

**Extinguishing Agents:** Extinguish fires with carbon dioxide, dry powder or alcohol-resistant foam. Water spray can be used for cooling of unaffected stock, but do not contaminate the water with product.

**Firefighting:** Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a recommended extinguishing agent for the surrounding fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Avoid inhaling hazardous vapors and fumes from burning materials. Keep upwind. Remove containers from fire area if possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal. Dyke fire control water for later disposal. Do not scatter the material. Avoid pollution of waterways. Do not use high volume water jet, due to contamination risk.

**Special Hazards:** Fire may produce irritating or poisonous vapors or gases (oxides of chlorine and sulphur) or other products of combustion. Firefighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.

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### 6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

**Personal Precautions:** Wear protective clothing. Avoid contact with skin and eyes. Do not breathe in fumes. For personal protection see Section 8.

**Environmental precautions:** Do not discharge into drains or the environment.

**Spills:** In the event of a major spill, prevent spillage from entering drains or water courses. Stop leak if safe to do so and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Product waste should be kept in clearly marked containers and disposed of according to the guidelines set out in Section 13 of this document.

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## 7. HANDLING AND STORAGE REQUIREMENTS

**Handling:** Harmful if swallowed. Avoid inhalation and contact with eyes and skin. Use with adequate ventilation. Do not handle broken packages without protective equipment. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet.

**Storage:** Store at temperature not exceeding 30 °C. Avoid contact with skin, eyes and clothing. Store in original sealed containers, in a well-ventilated and dry storehouse. Keep away from direct sunlight, food, seed, animals, children and uniformed persons. Do not leave spray solution in spray tanks for long periods.

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## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

**Acceptable Daily Intake (ADI):** No data available.

**Engineering Controls:** Ensure adequate ventilation, especially in confined areas.

### Personal Protective Equipment:

**Clothing:** Employee must wear appropriate protective (impervious) clothing including boots, hat and equipment to prevent repeated or prolonged skin contact with this substance.

**Gloves:** Employee must wear appropriate chemical resistant protective gloves to prevent contact with this substance.

**Eye Protection:** The use of chemical resistant goggles or face shield. 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.

**Respiratory:** Respiratory protection is not required for normal use and handling. During periods of abnormal exposure to heavy spray or mist, use a NIOSH approved dust/mist respirator. Limitations of respirator use specified by the approving agency and the manufacturer must be observed.

**Other Protection:** Do not eat, drink or smoke while handling this product. Prevent contamination of food, feeds, drinking water and eating utensils. After using this product wash hands and face before eating. Take extreme care to avoid drift. Wash accurately (preferably a shower) after work shift. Wash hands during breaks and at the end of the work with soap and water.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Odorless liquid.

**Density:** 1.29 g/ml (25 °C).

**Solubility in Water:** 18 mg/l

**Explosion Limits:** Negligible fire hazard.

**Hazardous Reactions:** Stable under normal temperature and pressure.

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## 10. STABILITY AND REACTIVITY

**Stability:** Considered stable. The product is unlikely to decompose or react under normal storage conditions.

**Conditions to Avoid:** Avoid heat and sunlight.

**Incompatible Materials:** The product is incompatible with strong oxidizing agents.

**Polymerization:** Will not occur.

**Decomposition products:** Thermal decomposition may emit toxic fumes of CO<sub>2</sub>, NO and smoke. Hydrogen cyanide gas in reduced atmospheres can occasionally form. Hydrogen chloride gas and other compound of chlorine can occasionally form. Hydrogen fluoride gas, other compound of fluorine and water can occasionally form.

## 11. TOXICOLOGICAL INFORMATION

Acute toxicity based on the active ingredient toxicity.

**Acute Oral LD<sub>50</sub> (rat):** >910 mg/kg

**Acute Dermal LD<sub>50</sub> (rat):** >2 000 mg/kg

**Acute Inhalation LC<sub>50</sub> (rat, 4 hr):** >1.74 mg/ℓ

**Skin and Eye Irritation (rabbit):** Slightly skin irritant to skin and eyes.

**Skin Sensitization (guinea pig):** No data available.

**Chronic Dietary Study:** No data available.

**Carcinogenicity:** Rats and mice fed oral doses of triclopyr at 3 to 30 mg/kg/day for 2 years showed no carcinogenic response.

**Mutagenicity:** Triclopyr is non-mutagenic in bacterial and cytogenetic assay systems. A mutagenicity study using rats was weakly positive, but a negative result was found in mice, the more sensitive species. Based on these data, triclopyr is unlikely to be mutagenic.

**Reproductive Hazard:** Triclopyr does not appear to cause reproductive toxicity.

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## 12. ECOLOGICAL INFORMATION

Ecotoxicity is based on the active ingredient toxicity.

**Aquatic Toxicity Fish LC<sub>50</sub> (96 hr):** 0.74 mg/ℓ (rainbow trout); 0.87 mg/ℓ (bluegill sunfish). Highly toxic to fish.

**Aquatic Toxicity Daphnia EC<sub>50</sub> (48 hr):** 0.4 mg/ℓ. Highly toxic to daphnia.

**Aquatic Toxicity Algae EC<sub>50</sub> (5 days):** No data available.

**Avian Toxicity LD<sub>50</sub> (9 days):** >2 935 mg/kg (bobwhite quail); >1 698 mg/kg (mallard duck). Practically non-toxic to birds.

**Bee Toxicity LD<sub>50</sub>:** >100 µg/bee (contact). Non-toxic to bees.

**Biodegradability:** In natural soil and in aquatic environments, the ester and amine salt formulations rapidly convert to the acid, which in turn is neutralized to a relatively nontoxic salt. It is effectively degraded by soil micro-organisms and has a moderate persistence in soil environments. The half-life in soil ranges from 30 to 90 days, depending on soil type and environmental conditions, with an average of about 46 days.

**Bio-accumulation:** No data available.

**Mobility:** Triclopyr is not strongly adsorbed to soil particles and has the potential to be mobile.

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## 13. DISPOSAL CONSIDERATION

**Pesticide Disposal:** Emptied containers retain product residues. Observe all labelled safeguards until container is reconditioned or destroyed. Do not contaminate crops, grazing, rivers or dams with chemical or used containers. Do not allow material to contaminate ground water system. Dispose of waste from residues / unused product in accordance with national regulations. Waste must be incinerated in a suitable incineration plant holding a permit by the competent authorities.

**Package Product Wastes:** Emptied containers retain vapour and product residues. Observe all labelled safeguards until containers are cleaned, reconditioned, or destroyed. Rinse empty containers three times with a volume of water equal to at least one tenth of that of the container. Add the rinsings to the spray tank before perforating and flattening the container. Dispose of in approved landfill or preferably in a pesticide incinerator.

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## 14. TRANSPORT INFORMATION

**UN No.:** 3082

**Hazard Class:** 9

**Packing Group:** III

**Proper Shipping Name:** Environmental Hazardous Substance; Liquid; N.O.S (contains Triclopyr).

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## 15. REGULATORY INFORMATION

**Risk Phrases:**

- R10-** Flammable
- R20/21/22-** Harmful by inhalation in contact with skin and if swallowed.
- R36/37-** Irritation to eyes and respiratory system.
- R48-** Dangerous of serious damage to health by prolonged exposure.
- R51/53-** Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R 65-** Harmful: may cause lung damage if swallowed.

**Safety Phrases:**

- S½-** Keep locked up and out of the reach of children.
- S3/7/9-** Keep container tightly closed in cool, well ventilated place.
- S13-** Keep away from food, drinks and animal feeding stuffs.
- S15-** Keep away from heat
- S24/25-** Avoid contact with skin and eyes.
- S29/35-** Do not empty into drains; dispose of this material and its container in a safe way.
- S36/37/39-** Wear suitable protective clothing, gloves and eye/face protection.
- S42-** During fumigation and spraying wear suitable respiratory equipment.
- S 45-** In case of an accident or if you feel unwell, seek for medical advice.
- S 60-** This material and its container must be disposed of as hazardous waste.

**National Legislation:** This product is registered under Act 36 of 1947 of the Republic of South Africa. 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.

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## 16. OTHER INFORMATION

**Note:** Read and understand all the information on the product label before using the product.

**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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