

# PICLORAM

## SAFETY DATA SHEET

### 1. PRODUCT & COMPANY IDENTIFICATION

**Product Name:** PICLORAM  
**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**

Erintrade CC t/a RT Chemicals  
Co. Reg. No.: CK2001/036403/23  
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:** Picloram (Potassium salt) 240g/l SL  
**Chemical Name:** 4-amino-3,5,6-trichloropyridine-2-carboxylic acid  
**Empirical formula:**  $C_6H_3Cl_3N_2O_2$   
**CAS No.:** 1918-02-1  
**RSA Reg. No.:** L8299 Act 36 of 1947  
**Namibia Reg. No.:** N-AR 1453

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### 2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient Name</u>	<u>Concentration</u>
Picloram (Potassium Salt)	240 g/l min.
Polyglycol	± 60 g/l
Water	>800 g/l

### 3. HAZARD IDENTIFICATION

**Hazard Class:** WHO Class III -Slightly hazardous.

**Main Hazard:** Exposure may cause severe eye irritation.

**Flammability:** Water based product, non-flammable.

**Chemical Hazard:** This product may cause substantial, but temporary eye injury.

**Biological Hazard:** No specific biological hazard to mention.

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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 in humans.

**First Aid Measures:**

**Skin Contact:** Remove contaminated clothing at once. Rinse skin immediately with plenty of water for 15 to 20 minutes. Get medical attention if irritation persists.

**Eye Contact:** Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eyes. Get medical attention.

**Ingestion:** Get medical attention at once. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Never give anything by mouth to an unconscious person.

**Inhalation:** Remove individual to fresh air. Get medical attention if breathing difficulty occurs.

**Note to Physician:** If a burn is present, treat as any thermal burn, after decontamination. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

**Antidote:** There is no specific antidote.

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### 5. FIRE FIGHTING MEASURES

**Flammability:** Water based product, non-flammable.

**Extinguishing Agents:** Water fog, alcohol resistant foam, CO<sub>2</sub> or dry chemical.

**Firefighting:** Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

**Special Hazards:** Toxic, irritating vapors may be created under fire conditions. Contain firefighting water for future disposal.

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### 6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

**Personal Precautions:** Wear protective clothing. Avoid breathing vapours or spray drift. If necessary, wear a self-contained breathing apparatus.

**Environmental precautions:** Prevent spilled material from entering drains or watercourses. Contain spill and absorb with earth, sand, clay, or other absorbent material.

**Spills:** Soak up spills with absorbent material. Dike area in case of large spills. Picloram is an herbicide that acts through the leaves and roots of affected plants. Avoid contaminating soil near desirable vegetation. Do not allow spilled material to contaminate water supplies. For large spills, dike and barricade the affected area and contact local authorities.

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## 7. HANDLING AND STORAGE REQUIREMENTS

**Handling:** Keep out of reach of children or animals. This product may cause substantial, but temporary eye injury. It is harmful if inhaled or absorbed through the skin. Do not get this product on eyes, skin or clothing. Avoid breathing spray mist. Contaminated clothing should be washed separately from domestic laundry and line-dried. Once used for contaminated clothing, the washing machine should be operated through a complete cycle with hot water and detergent only, prior to use for domestic laundry. Avoid skin contact. Users should wash hands before eating, drinking, chewing gum, using tobacco or the toilet.

**Storage:** 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. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Do allow product to freeze.

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## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

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

**Engineering Controls:** Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. Atmospheric levels should be maintained below the exposure guidelines. When respiratory protection is required for certain operations, use an approved air-purifying respirator.

### Personal Protective Equipment:

**Clothing:** Long-sleeved shirt, long pants, shoes plus socks, protective waterproof (impermeable) gloves. Employee must wear appropriate protective clothing and equipment to prevent prolonged skin contact with this product. Clothing soaked with product solution should be promptly removed and laundered before re-use.

**Gloves:** Protective waterproof (impermeable) rubber or plastic gloves are recommended.

**Eye Protection:** Wear eye protection. During mixing or pouring operations or other activities in which eye contact with undiluted product is likely to occur, splash goggles should be worn. 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:** Brown liquid.

**Odor:** Not available.

**Boiling Point:** 100 °C

**Vapor Pressure:** 23 mm Hg at 20 °C.

**Specific Gravity (SG):** 1.16 at 20 °C.

**Solubility in Water:** Miscible in water.

**Auto-ignition Temperature:** None when tested to 550 °C.

**Flash Point:** None observed up to 101 °C (TCC).

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## 10. STABILITY AND REACTIVITY

**Stability:** The product is stable when stored under normal storage conditions at normal temperatures.

**Conditions to Avoid:** This product should be kept in a cool place, preferably below 30 °C. Containers should be kept dry.

**Incompatible Materials:** None under normal use conditions. Under abnormal conditions, avoid oxidizing materials, strong acids. Consult manufacturer for specific cases.

**Decomposition Products:** Hydrogen chloride and nitrogen oxides may be produced if this product is involved in a fire.

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## 11. TOXICOLOGICAL INFORMATION

Acute toxicity based on the active ingredient toxicity.

**Acute Oral Toxicity LD<sub>50</sub> (rat):** >5 000 mg/kg

**Acute Dermal Toxicity LD<sub>50</sub> (rabbit):** >5 000 mg/kg

**Acute Inhalation Toxicity LD<sub>50</sub> (4 hr):** The maximum practically attainable concentration of this product in the tests (8.11 mg/ l for four hours) produced no ill effects in test animals. No adverse effects are anticipated from single exposure to vapor.

**Eye Irritation:** This product may cause severe eye irritation. Corneal injury is unlikely. Effects are likely to heal readily.

**Skin Irritation:** Prolonged or repeated exposure may cause skin irritation or even a burn. A single prolonged exposure is not likely to result in the product being absorbed through the skin in harmful amounts.

**Skin Sensitization:** Not a skin sensitizer. This product did not cause allergic skin reactions when tested in humans.

**Chronic Effects:** In animals, effects have been reported on the liver.

**Carcinogenicity:** Picloram did not cause cancer in animal studies.

**Mutagenicity:** The preponderance of data shows picloram to be non-mutagenic in in vitro (test tube) and animal test systems.

**Reproductive Hazard:** Birth defects are unlikely. Even exposures large enough to have adverse effects on the mother should have no effect on the fetus. Picloram has been shown not to interfere with reproduction in animal studies.

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## 12. ECOLOGICAL INFORMATION

Ecotoxicity is based on the active ingredient toxicity.

**Aquatic Toxicity Fish LC<sub>50</sub> (96 hr):** Picloram (acid) is slightly toxic to aquatic organisms on an acute basis.

**Aquatic Toxicity Daphnia EC<sub>50</sub> (48 hr):** Picloram (acid) is slightly toxic to aquatic organisms on an acute basis.

**Aquatic Toxicity Algae EC<sub>50</sub> (5 days):** Picloram (acid) is slightly toxic to aquatic organisms on an acute basis.

**Avian Toxicity LD<sub>50</sub> (9 days):** Picloram (acid) is practically non-toxic to birds on an acute basis.

**Bee Toxicity LD<sub>50</sub>:** Picloram is considered non-toxic to bees

**Biodegradability:** Picloram is degraded relatively rapidly on the soil surface or in clear running water by sunlight. In soil, picloram is degraded more slowly by soil microorganisms, with a half-life of 30 to 330 days, depending on soil temperature, type and moisture content. On plant surfaces, photodecomposition occurs, possibly with cleavage of the pyridine ring. In mammals, following oral administration, picloram is rapidly excreted in an unchanged form.

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

**Mobility:** No data available.

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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.

**Package Product Wastes:** Emptied containers retain vapor and product residues. Observe all labelled safeguards until container is 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. Do not contaminate ponds, waterways or ditches with chemical or used containers. Containers that are in a good condition may be returned to a drum re-conditioner for re-use with the same type of pesticide product. Do not re-use empty container for any other purpose.

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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 Picloram)

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## 15. REGULATORY INFORMATION

**Risk Phrases:** R36- Irritating to eyes.

R43- May cause sensitization by skin contact.

**Safety Phrases:** S2- Keep out of reach children.

S24/25- Avoid contact with skin and eyes.

S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

S 45- In case of accident or if you feel unwell, seek medical advice immediately.

S 61- Avoid release to the environment.

**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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