

FriXon

SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

Product Name: FriXon
Pesticide Classification: Herbicide
UN No.: 1992

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

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: Fluroxypyr 200g/l EC
Chemical Name: 1-methylheptyl((4-amino-3,5-dichloro-6-fluoro-2-pyridinyl)oxy)acetate (IUPAC)
Empirical Formula: C₁₅H₂₁Cl₂FN₂O₃
CAS No.: 81406-37-3
RSA Reg. No.: L8399 Act 36 of 1947

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient Name</u>	<u>Concentration</u>
Fluroxypyr-meptyl (95% tech)	≥20%
Alkylphenol ethoxylates	±10%
Solvesso 150#	±60%

3. HAZARD IDENTIFICATION

Hazard Class: WHO Class III -Slightly hazardous.

Main Hazard: Irritating to respiratory system. May cause lung damage if inhaled. Vapors may cause drowsiness and dizziness.

Flammability: Flammable

Chemical Hazard: No specific chemical hazard to mention.

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

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: Remove victim from area of exposure. Wash off remaining material with plenty of water.

Skin Contact: Irritation is unlikely. However, if irritation does occur flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed. If in doubt obtain medical advice.

Eye Contact: No effects expected. If irritation does occur flush contaminated eyes with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes.

Ingestion: First aid is not generally required. If in doubt, contact a poison information center or a doctor.

Inhalation: First aid is not generally required. If in doubt, contact a poisons information center or a doctor.

5. FIRE FIGHTING MEASURES

Flammability: Flammable

Extinguishing Agents: Preferred extinguishing media are CO₂, dry chemical, foam or water fog.

Firefighting: When fighting fires involving significant quantities of this product, wear a splash suit complete with self-contained breathing apparatus.

Special Hazards: Fire decomposition products from this product are likely to be toxic and corrosive if inhaled. Take appropriate protective measures. This product is classified as a C1 combustible product. There is a slight risk of an explosion from this product if commercial quantities are involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Vapors from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances.

6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal Precautions: Wear protective clothing.

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. As a minimum, wear overalls, goggles and gloves. Suitable materials for protective clothing include rubber and PVC. 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. Sweep up and shovel or collect recoverable product into labelled containers disposal. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry. Keep away from open flames, sparks and heat. Dispose of at an authorized waste collecting point.

7. HANDLING AND STORAGE REQUIREMENTS

Handling: Keep exposure to this product to a minimum, and minimize the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures and make sure that those measures are followed. The measures detailed below under "storage" should be followed during handling in order to minimize risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: Note that this product is combustible and therefore, for storage, meets the definition of dangerous goods in some states. We suggest you consult dangerous goods regulations in order to clarify your obligations regarding the storage of this product. Make sure that containers of this product are kept tightly closed. Keep containers of this product in a well-ventilated area. Make sure that the product does not come into contact with substances listed in section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check label for further storage instructions.

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: The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow-length) when handling this product.

Gloves: Chemical resistant gloves.

Eye Protection: Wear eye protection.

Respiratory: Respiratory protection is not required if good ventilation is maintained.

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. Wash accurately (preferably in a shower) after work shift. Wash hands during breaks and at the end of the work with soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light yellow to brown liquid.

Odor: Mild solvent odor.

Density: 0.98 ± 0.02 g/ml at 20 °C.

Vapor Pressure: 1.35×10^{-3} mPa at 20 °C (Fluroxypyr-meptyl)

Solubility in Water: Forms emulsion in water.

Octanol/water Partition Coefficient: $\log = 4.5$

pH: 4.5-7

Flash Point: 67 °C

Flammability: Flammable

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: Strong acids, strong bases, strong oxidizing agents.

Decomposition Products: Carbon dioxide and if combustion is incomplete, carbon monoxide and smoke can form. Nitrogen and its compounds and under some circumstances, oxides of nitrogen can form. Occasionally hydrogen cyanide gas, hydrogen chloride gas and other compounds of fluorine can also form.

11. TOXICOLOGICAL INFORMATION

Acute toxicity based on the active ingredient toxicity.

Acute Oral Toxicity LD₅₀ (rat): >5 000 mg/kg

Acute Dermal Toxicity LD₅₀ (rabbit): >2 000 mg/kg

Acute Inhalation Toxicity LD₅₀ (rat, 4 hr): >1 mg/l. Available data indicates that this product is not harmful (short term exposure).

Skin irritation: Brief contact is essentially non-irritating to skin. Prolonged or repeated exposure may cause skin irritation, even a burn.

Eye irritation: Moderate irritant to eyes. Causes substantial but temporary irritation, redness and pain.

Skin Sensitization (guinea pig): No data available.

Sub-chronic Effects: Fluroxypyr-meptyl showed a NOEL of 1 000 mg/kg/day in a 90-day rat dietary study and a 21-day rabbit dermal study. Ninety day feeding studies with fluroxypyr-meptyl showed NOELs of 80 mg/kg/day (wistar rats), 700 mg/kg/day (fischer 344 rats), 1 342 mg/kg/day (male mice) and 1748 mg/kg/day (female mice). In a 4-week dietary, range finding study with fluroxypyr-meptyl in dogs the NOEL was >50 mg/kg/day.

Chronic Effects: NOELs found in chronic dietary studies are as follows: 150 mg/kg/day (dog), 300 mg/kg/day (mouse), 80 mg/kg/day (wistar rats), 100 mg/kg/day (male fischer 344 rats) and 500 mg/kg/day (female fischer 344 rats).

Carcinogenicity: There was no evidence of carcinogenicity in an 18-month mouse feeding study and a 24-month rat feeding study at all dosages tested. The NOELs shown in the mouse and rat oncogenicity studies were 1 000 and 320 mg/kg/day, respectively.

Mutagenicity: No data available.

Reproductive Hazard: Studies show that fluroxypyr-meptyl is not teratogenic nor will it interfere with in utero development. Studies show a lack of genotoxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity is based on the active ingredient toxicity.

Aquatic Toxicity Fish LC₅₀ (96 hr): >0.9 mg/l (rainbow trout); >0.9 mg/l (golden orge). Harmful to aquatic organisms.

Aquatic Toxicity Daphnia LC₅₀ (48 hr): >100 mg/l

Aquatic Toxicity Algae EC₅₀ (72 hr): >0.9 mg/l (green algae).

Avian Birds LD₅₀: >2 000 mg/kg (bobwhite quail); >2 000 mg/kg (mallard duck). Not toxic to birds.

Bee Toxicity LD₅₀: Not toxic to bees.

Biodegradability: This product is biodegradable. It will not accumulate in the soil or water or cause long term problems. The product is not persistent. Degradation is primarily via hydrolysis.

Bio-accumulation: Product half-life time (t_{1/2}) < 7 days.

Mobility: Low mobility. K_{oc} = 6 200 – 43 000 ml/g.

13. DISPOSAL CONSIDERATION

Pesticide Disposal: 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 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. Add the rinsings to the spray tank before perforating and flattening the container. Dispose of in approved landfill or preferably in a pesticide incinerator.

14. TRANSPORT INFORMATION

UN No.: 1992

Hazard Class: 3

Packing Group: III

Proper Shipping Name: Flammable; Liquid; Toxic; N.O.S. (contains Fluroxypyr-meptyl)

15. REGULATORY INFORMATION

- Risk Phrases:**
- R10-** Flammable
 - R37-** Irritating to respiratory system.
 - R51/53-** Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 - R65-** Harmful: may cause lung damage if swallowed.
 - R67-** Vapours may cause drowsiness and dizziness.
- Safety Phrases:**
- S35-** This material and its container must be disposed of in a safe way.
 - S57-** Use appropriate containment to avoid environmental contamination.
 - S62-** If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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.

16. OTHER INFORMATION

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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