

CalyFix 2.4D SL

SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

Product Name: CalyFix 2.4D SL
Pesticide Classification: Plant Growth Regulator
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

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: 2,4-D Sodium Salt 25 g/l
Chemical Name: Sodium(2,4-dichlorophenoxy) acetate [IUPAC]
Empirical Formula: $C_8H_5Cl_2NaO_3$
CAS No.: 2702-72-9
RSA Reg. No.: L8301 Act 36 of 1947

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient Name</u>	<u>Concentration</u>
2,4-D Sodium Salt	25 g/l
Water (carrier)	Balance

3. HAZARD IDENTIFICATION

Hazard Class: WHO Class II -Moderately hazardous.

Main Hazard: Harmful if swallowed. Causes slight skin and eye irritation.

Flammability: Non-flammable

Chemical Hazard: Carbon monoxide and hydrogen chloride may form when this product is involved in a fire.

Biological Hazard: No specific biological hazard to mention.

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 any contaminated clothing. Wash skin thoroughly with soap and water. Wash contaminated clothing before re-use. Treat symptomatically. Seek medical attention if symptoms persist.

Eye Contact: Flush eyes with clean water for at least 15 minutes. Remove contact lenses if possible. Get medical attention.

Ingestion: Rinse mouth with water. Keep patient at rest and seek medical attention. Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed to do so by medical personnel. In the case of vomiting, avoid contamination of respiratory passages.

Inhalation: Move victim from contaminated area to fresh air. Avoid inhalation of vapor or spray mist. Seek medical attention.

Advice to Physician: Treat symptomatically.

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

5. FIRE FIGHTING MEASURES

Flammability: Non-flammable

Extinguishing Agents: Use water, foam, dry chemical or carbon dioxide (CO₂). Minimize the use of water to prevent environmental contamination.

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 the contaminated water and dispose of it according to Section 13 of this document.

Special Hazards: Carbon monoxide and hydrogen chloride may form when this product is involved in a fire.

6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal precautions: Use personal protection equipment (full overall, boots, rubber gloves, eye protection).

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

Spills: Absorb small quantities with sand, soil or other absorbent material. Wash the spill area with detergent and water. Minimize the use of water to prevent environmental contamination. Contain large spills with dykes, sand bags or other types of barriers. Remove heavily contaminated soil and place in clearly marked containers for disposal. Dispose of in an approved manner according to Section 13. Wash the spill area with detergent and water. Leaking containers should be placed in leak-proof drums and transported for repacking or reprocessing.

7. HANDLING AND STORAGE REQUIREMENTS

Handling: Avoid contact with eyes. Do not eat, drink or smoke while handling this product. Wash hands and exposed skin thoroughly after handling or contact with this product. Do not contaminate drains, sewers and water bodies when disposing of equipment rinse water. Refer to Section 13 for disposal of rinse water. Observe all safeguards on the label as to cleaning and destruction of the container.

Storage: Do not allow to freeze and do not store at temperatures above 32 °C. Do not store with food, feed, seed, fertilizer and drinking water. Keep out of reach of children, uninformed persons and animals. Store only in the original labelled container. The minimum shelf life is 2 years.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Acceptable Daily Intake (ADI): No data available.

Engineering Controls: Use outdoors in a well-ventilated area. Comply with occupational safety, environmental, fire and other applicable regulations. Wear suitable personal protective equipment.

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: For repeat or prolonged exposure wear chemical resistant gloves.

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 Protection: No special respiratory requirement are required when used as recommended.

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 a work shift. Wash hands with soap and water during breaks and at the end of the work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Off-white colour.

Form: Soluble concentrate.

Odor: None

Specific Gravity: 1 – 1.1

Solubility Water: Completely soluble.

pH: 7 – 7.4

10. STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions.

Conditions to Avoid: No data available.

Incompatible Materials: No data available.

Decomposition Products: Carbon monoxide and hydrogen chloride may form under fire conditions.

11. TOXICOLOGICAL INFORMATION

Acute toxicity based on the active ingredient toxicity.

Acute Oral LD₅₀ (rat): >2 000 mg/kg. Harmful if swallowed.

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

Acute Inhalation LC₅₀ (rat, 4 hr): No data available.

Skin and Eye Irritation (rabbit): Mild skin irritation can occur. Moderate to severe eye irritation can occur.

Skin Sensitization (guinea pig): Mild to no skin sensitization.

Chronic Dietary Study: No data available.

Carcinogenicity: Not carcinogenic and not mutagenic.

Mutagenicity: Not carcinogenic and not mutagenic.

Teratogenicity: Not a developmental toxin at recommended use rates.

Reproductive Hazard: Not a reproductive toxin at recommended use rates.

12. ECOLOGICAL INFORMATION

Ecotoxicity is based on the active ingredient toxicity.

Aquatic Toxicity Fish LC₅₀ (96 hr): 320 mg/l (rainbow trout); 263 mg/l (bluegill sunfish).

Aquatic Toxicity Daphnia LC₅₀ (48 hr): 40 mg/l (*daphnia magna*).

Aquatic Toxicity Algae ErC₅₀ growth rate (72 hr): 33 mg/l (green algae)

Avian Toxicity LC₅₀ (9 days): >5 000 mg/kg diet (bobwhite quail); >5 000 mg/kg diet (mallard duck). Practically non-toxic to birds.

Bee Toxicity LD₅₀: 94 µg/bee (Honey bee). Regarded as non-toxic to bees.

Biodegradability: No data available.

Bio-accumulation: Bio-accumulation is not expected due to high solubility and low octanol-H₂O partition co-efficient.

Mobility: No data available.

13. DISPOSAL CONSIDERATION

Pesticide Disposal: Recycle if appropriate equipment and/or facilities are available. Dispose of as hazardous industrial waste via a licensed disposal contractor. Burn only in controlled high temperature incinerator. Keep out of drains, sewers, ditches and water ways. Follow all local and national regulations.

Package Product Wastes: Triple or pressure rinse empty containers. Pour rinse water into spray tank to be sprayed on the target area. Store for collection by approved waste disposal service. Dispose of as hazardous industrial waste via a licensed disposal contractor. Do not use containers for any other purpose. Follow all local and national regulations.

14. TRANSPORT INFORMATION

Un No.: 3082

Class: 9

Packaging Group: III

Proper Shipping Name: Environmentally Hazardous Substance; Liquid; N.O.S.

15. REGULATORY INFORMATION

Risk Phrases: R22- Harmful if swallowed.

Safety Phrases: S1/2- Keep locked up and out of the reach of children.

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

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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