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Reviewed: June 2018

Tarmax 120 EC

SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

Product Name: Tarmax 120 EC

Pesticide Classification: Herbicide
UN No.: 3082

<u>Supplier</u> <u>Registration Holder</u>

Enviro Bio-Chem (Pty) Ltd Enviro Africom (Pty) Ltd

Co. Reg. No.: 2013/194774/07

Co. Reg. No: 2013/194774/07

44 Kerk Street, Lichtenburg

North West, South Africa 2740

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: Clethodim 120 g/ℓ EC

Chemical Name: (5RS)-2-{(E)-1-[(2E)-3-chloroallyloxyimino]propyl}-5-[(2RS)-2-(ethylthio)propyl]-3-

hydroxycyclohex-2-en-1-one

Empirical Formula: $C_{17}H_{26}C\ell NO_3S$ CAS No.:99129-21-2

RSA Reg. No.: L10798 Act/Wet No. 36 of/van 1947

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient Name</u> <u>Concentration</u>

Clethodim 12% Inert ingredients 88%





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3. HAZARD IDENTIFICATION

Hazard Class: WHO Class III - Slightly hazardous.

Main Hazard: May be harmful if swallowed.

Flammability: Non-flammable

Chemical Hazard: During a fire this product may release smoke and hazardous decomposition products.

Biological Hazard: None to specifically 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. Show this Material Safety Data Sheet to the doctor. Have the product container or label with you when calling the Poison Control Centre or doctor, or when going for treatment.

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

First Aid Measures:

Skin Contact: In case of contact, immediately flush skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes.

Eye Contact: In case of contact, immediately flush the eyes with large quantities of running water for a minimum of 15 minutes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eye and lids with water. Remove contact lenses if present, after the first 5 minutes, then continue rinsing eyes.

Ingestion: Call the Poison Control Centre or doctor immediately for treatment advise. Do not induce vomiting unless told to do so by the Poison Control Centre or doctor. Never induce vomiting or give anything to drink to an unconscious person.

Inhalation: Immediately remove source of contamination or move victim to fresh air. If breathing has stopped, perform artificial respiration and administer oxygen. Do not give mouth-to-mouth resuscitation if victim ingested or inhaled the substance. Keep person warm and at rest. Treat symptomatically and supportively as and when required. Obtain medical advice if necessary.

Advice to Physician: Treat symptomatically.

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

5. FIRE FIGHTING MEASURES

Flammability: Non-flammable

 $\textbf{Extinguishing Agents:} \ \ \textbf{Water spray, foam, carbon dioxide, dry chemical powder.}$

Firefighting: Keep out of smoke. Fight fire from upwind position. Use self-contained breathing equipment. Contain runoff by diking to prevent entry into sewers or waterways.

Special Hazards: By thermic decomposition, possibility of formation of toxic gases (sulfur oxide, phosphorus oxide, nitrogen oxide, carbon oxide)

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.

Spill: Collect contaminated products on the surface concerned, transfer to closed drums before sending in a specialized incineration treatment centre. Wash the contaminated surface with water and collect washing waters for treatment. Cover the contaminated zone using absorbent materials such as sand or sepiolite.



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7. HANDLING AND STORAGE REQUIREMENTS

Handling: Do not eat, drink or smoke when using. Wear appropriate protective clothes, adequate gloves, glasses or masks. Avoid prolonged or frequent contact of skin with the product. Respect good hygienic body conditions and cleanliness of the working area. Wash hands abundantly after handling. Do not wash working clothes with household linen.

Storage: Store in a cool dry area. Store away from excessive heat and open flames. Store in an area designated specifically for pesticides. Do not store near any material intended for use or consumption by humans.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Acceptable Daily Intake (ADI): Information not 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.

Gloves: Use chemical-resistant gloves to prevent dermal exposure.

Eye Protection: Goggles or a face-shield should be used when needed to prevent liquid splashes from getting into the eyes. 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.

Respirator: Under normal handling conditions no respiratory protection is needed. However, when respiratory protection is appropriate, use a respirator approved for pesticides by the National Institute for Occupational Safety and Health (NIOSH).

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Homogeneous clear liquid.

Colour: Light yellow to yellow.

Odour: Slight aromatic odour.

Boiling Point: Not available.

Specific Gravity: 0.98 ± 0.02

Acidity: 4-6 pH

Compatibility: Incompatible with oxidizing agents, such as chlorates, nitrates, peroxides etc.

10. STABILITY AND REACTIVITY

Stability: Product is stable under normal warehouse conditions.

Conditions to Avoid: None to specifically mention.

Incompatible Materials: Incompatible with oxidizing agents, such as chlorates, nitrates, peroxides etc.

Decomposition Products: By thermic decomposition, possibility of formation of toxic gases (sulfur oxide, phosphorus oxide, nitrogen oxide, carbon oxide)



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11. TOXICOLOGICAL INFORMATION

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

Acute Dermal LD₅₀ (rat): >2 000 mg/kg

Acute Inhalation LC₅₀ (rat, 4 hr): >10.0 mg/l

Eye Irritation (rabbit): Slightly irritating to eyes.

 $\textbf{Skin Irritation (rabbit):} \ \ \text{Not irritating to skin}.$

Sensitization (guinea pig): No sensitization.

Chronic Effects: Long-term exposure to low levels of the material is not known to cause any ill effects to humans.

Carcinogenicity: Based on the available data, it appears that Clethodim is not carcinogenic.

Mutagenicity: The available data for mutagenicity and genotoxicity yield no evidence for mutagenic or genotoxic activity.

Reproductive Hazard: It appears unlikely that reproductive effects would occur in humans under normal circumstances.

12. ECOLOGICAL INFORMATION

Ecotoxicity based on active ingredient toxicity.

Aquatic Toxicity Fish LC₅₀ (96 hr): 67 mg/ ℓ (rainbow trout); >120 mg/ ℓ (bluegill sunfish)

Aquatic Toxicity Daphnia LC₅₀ (48 hr): >120 mg/ ℓ

Aquatic Toxicity Algae EC₅₀ (5 days): 57.8 mg/l

Avian Toxicity LD₅₀: >6 000 mg/kg (mallard duck); >2 000 mg/kg (bobwhite quail).

Bee Toxicity LD₅₀ (contact): $> 100 \mu g/bee$

Bio-accumulation: No data available.

Mobility: No data available.

13. DISPOSAL CONSIDERATION

Pesticide Disposal: Dispose of waste product as hazardous waste via a licensed disposal contractor to an approved landfill. Do not discharge into drains or sewers. Do not contaminate crops, grazing, rivers or dams with chemical or used containers. Follow container label directions for disposal of wastes generated during use in compliance with the FIFRA product label.

Package Product Wastes: Dispose of container as hazardous waste via a licensed disposal contractor to an approved landfill.

14. TRANSPORT INFORMATION

UN No.: 3082

Hazard Class: 3

Packing Group: III

Proper Shipping Name: Environmentally Hazardous Substance; Liquid; N.O.S. (contains Clethodim)



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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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