

ENCORE

SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

Product Name: ENCORE
Pesticide Classification: Insecticide (miticide)
UN No.: 3077

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: Buprofezin 500 g/kg WP
Chemical Name: 2-tert-butylimino-3-isopropyl-5-phenyl-1,3,5-thiadiazinan-4-one (IUPAC)
Chemical Formula: C₁₆H₂₃N₃OS
CAS No.: 69327-76-0
RSA Reg. No.: L7366 Act 36 of 1947

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient Name</u>	<u>Concentration</u>
Buprofezin	≥50% (w/w)
Inert ingredients	≤50 (w/w)

3. HAZARD IDENTIFICATION

Hazard Class: WHO Class III -Slightly hazardous.

Main Hazard: Harmful if swallowed, inhaled or absorbed through the skin. Causes moderate eye irritation.

Flammability: Non-flammable

Chemical Hazard: Carbon dioxide, carbon monoxide, nitrogen oxides and sulfur dioxide may form in case of a fire.

Biological Hazard: Considered non-toxic to aquatic species at its limit of solubility in water.

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: Symptoms from excessive ingestion of buprofezin technical may include subdued mood, slight muscular incoordination and a slightly enlarged abdomen.

First Aid Measures:

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

Eye Contact: Hold eyes open and flush immediately with clear, clean running water for at least 15 minutes. If eye symptoms (redness, irritation or pain) persist refer patient to ophthalmologist for examination of eye.

Ingestion: Call a physician or the poison control center. Drink one or two glasses of water. Induce vomiting by touching the back of the throat with the finger, or if available, by administering syrup of ipecac. If the person is unconscious, do not give anything by mouth and do not induce vomiting.

Inhalation: Remove the victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

Advice to Physician: Provide supportive care and symptomatic treatment.

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

5. FIRE FIGHTING MEASURES

Flammability: Non-flammable

Extinguishing Agents: Alcohol-resistant foam, carbon dioxide, dry chemicals and water spray.

Firefighting: Firefighters should wear positive-pressure, 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: Carbon dioxide, carbon monoxide, nitrogen oxides and sulfur dioxide may form.

6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal Precautions: Wear protective clothing. Avoid breathing dust 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: Do not inhale product dust. Use a suitable dust respirator. Avoid contact with skin and eyes. Carefully sweep up the spilled product, avoiding formation of a dust cloud and place it in a suitable container. Seal the container. The area can be washed with water to remove the last traces of the product but keep the wash water out of water courses or sewers. Inform authorities immediately if contamination occurs. Dispose of product waste according to Section 13.

7. HANDLING AND STORAGE REQUIREMENTS

Handling: This product is harmful if swallowed, inhaled or absorbed through the skin. It causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling the product. Remove contaminated clothing and wash them before re-use. Wash hands before eating, drinking chewing gum, using tobacco, or using the toilet. Follow the manufacturer's instructions for cleaning and maintaining personal protective equipment (PPE). Keep PPE separate from other laundry. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Do not apply this product through any type of irrigation system. Allow only protected handlers in the area during application.

Storage: Store in a cool and dry area. Keep out of reach of unauthorized persons, children and animals. Store on its original labelled container in shaded, well ventilated area. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Read the product label before use and refer back to it whenever necessary. The precautions below are suggested where a potential for exposure exists. Emergency conditions may require additional protective measures.

Acceptable Daily Intake (ADI): No data available.

Engineering Controls: Control airborne contaminants below the exposure guidelines. Use with adequate ventilation to minimize exposure. Local exhaust ventilation may be necessary, especially when the product is used in a confined area.

Personal Protective Equipment:

Clothing: Long-sleeved shirt, long pants, shoes plus socks, protective waterproof (impermeable) gloves. Employees 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: Use an appropriate respirator to minimize dust inhalation.

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 work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White or pale yellow loose powder

Suspensibility: $\geq 80\%$

Wetting time: ≤ 60 s

pH: 8.0 – 10.5

Fineness (through 325 mesh sieve): $\geq 98\%$

Water: $\leq 2.0\%$

Stability: It is stable at ambient temperature and pressure for 2 years.

10. STABILITY AND REACTIVITY

Stability: This product is stable. The active ingredient is stable under dark and cool storage conditions. It is also stable in acid and alkali solutions.

Conditions to Avoid: Avoid excessive temperatures.

Incompatible Materials: None to specifically mention.

Decomposition Products: May decompose at extreme high temperatures to form oxides of carbon, nitrogen and sulfur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity based on the active ingredient toxicity.

Acute Oral LD₅₀ (rat): 2 198 mg/kg. Slightly toxic.

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

Acute Inhalation LC₅₀ (rat, 4 hr): >4.57 mg/l. Inhalation of this product is harmful.

Eye Irritation (rabbit): Causes moderate eye irritation.

Skin Irritation (rabbit): Slightly irritating to skin.

Skin Sensitizer (guinea pig): Not a skin sensitization

Chronic Dietary Study: No data available.

Carcinogenicity: Non-carcinogenic

Mutagenicity: Non-mutagenic

Reproductive Hazard: No data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity is based on the active ingredient toxicity.

Aquatic Toxicity Fish LC₅₀ (48 hr): >1.4 mg/l (rainbow trout). Considered non-toxic to aquatic species at its limit of solubility in water.

Aquatic Toxicity Daphnia LC₅₀ (3 hr): 50.6 mg/l.

Aquatic Toxicity Algae EC₅₀ (5 days):

Avian Toxicity LD₅₀ (9 days): Considered non-toxic to avian species.

Bee Toxicity LD₅₀: No data available.

Biodegradability: No data available.

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. Waste resulting from the use of this product that cannot be re-used or reprocessed should be disposed of in a landfill approved for pesticide disposal in accordance with applicable local procedures. Comply with any local legislation applying to waste disposal.

Package Product Wastes: Remove the water-soluble bag from the outer packaging and place the inner bag into the application equipment. Then dispose of the empty outer packaging by discarding it in a sanitary landfill or by incineration.

14. TRANSPORT INFORMATION

UN No.: 3077

Class: 9

Packaging Group: III

Proper Shipping Name: Environmentally Hazardous Substance; Solid; N.O.S. (contains Buprofezin).

15. REGULATORY INFORMATION

Risk Phrases: R20/21/22- Harmful by inhalation and in contact with skin and if swallowed.

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

S13- Keep away from food, drink and animal feeding stuffs.

S20/21- When using, do not eat, drink or smoke.

S24/25- Avoid contact with the skin and eyes.

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

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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