

Acephate 750

SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

Product Name: Acephate 750
Pesticide Classification: Insecticide
UN No.: 2783

Supplier

Enviro Bio-Chem (Pty) Ltd
Co. Reg. No.: 2013/194774/07
44 Kerk Street, Lichtenburg
North West, South Africa 2740

Registration Holder

RT Chemicals
Co. Reg. No.: CK87/21925/23
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: Acephate 750 g/kg SP
Chemical Name: O, S-dimethyl acetylphosphoramidothioate
Empirical Formula: C₄H₁₀NO₃PS
CAS No.: 30560-19-1
RSA Reg. No.: L6753 Act 36 of 1947
Botswana Reg. No.: W130505

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient Name</u>	<u>Concentration</u>
Acephate	≥ 75% (w/w)
Inert Ingredients	± 25% (w/w)

3. HAZARD IDENTIFICATION

Hazard Class: WHO Class III -Slightly hazardous.

Main Hazard: Slightly toxic product.

Flammability: Combustible material. Only slight fire and explosion hazard when exposed to heat or flame. Could burn, but does not ignite readily.

Chemical Hazard: Normal combustion produce carbon dioxide, sometimes nitrogen, phosphorous and oxides of sulfur, etc. Incomplete combustion may produce carbon monoxide.

Biological Hazard: Toxic to fish, birds and bees.

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: The symptoms for acute poisoning can be visible from 12 hours, however if the product was taken orally the symptoms can immediately start occurring. The symptoms of light poisoning are headaches, dizziness, disgusting, vomiting, perspiration, weakness, vague eyesight, stuffy breath and a bad appetite. The symptoms for moderate poisoning includes all of the symptoms for light poisoning as well as breathing difficulty, muscle tremors, myosis, falling into a trance, unstable when walking, perspiration, slobbering, abdominal pain and diarrhoea.

First Aid Measures:

Skin Contact: Remove contamination clothing, shoes and leather goods. Wash affected skin immediately with water and non-abrasive soap. Seek medical attention if symptoms persist.

Eye Contact: Immediately flush eyes with gently flowing cold water for 10 to 20 minutes, holding the eyelids open. If eye symptoms (redness, irritation or pain) persist refer patient to ophthalmologist for examination of eyes.

Ingestion: Have victim drink 1-2 glasses of water or milk and then induce vomiting. Do not induce vomiting or give anything by mouth to an unconscious person. Seek medical attention.

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

Advice to Physician: This material contains a cholinesterase inhibitor. If there is any sign of cholinesterase inhibition, take atropine sulphate as antidote. 2-PAM can be used together with atropine, but never used alone.

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

5. FIRE FIGHTING MEASURES

Flammability: Combustible material. Only slight fire and explosion hazard when exposed to heat or flame. Could burn, but does not ignite readily.

Extinguishing Agents: Use dry powder, carbon dioxide, water spray or regular foam.

Firefighting: Wear positive pressure self-containing breathing apparatus. Avoid breathing smoke and mists. Remove containers from fire area if safe to do so. Do not enter any enclosed area without full protective equipment. Use a recommended extinguishing agent for the type of surrounding fire. Keep material out of sewers and water sources. Avoid inhalation of hazardous vapours. Keep upwind.

Special Hazards: Normal combustion produces carbon dioxide, sometimes nitrogen, phosphorous and oxides of sulfur, etc. Incomplete combustion may produce carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal Precautions: Use proper protective equipment to minimize exposure. Do not inhale fumes. Ventilate area of spill or leak. Avoid contact with skin, eyes or clothes.

Environmental Precautions: Prevent spilled material from entering drains or watercourses. Contain spill and absorb with earth, sand, clay or another absorbent material. Take all necessary action to prevent and to remedy the adverse effect of the spill. Ensure the disposal is in compliance with local regulations.

Spills: For spill on land, sweep up material and place in a chemical waste container. Wash area with soap and plenty of water. Pick up wash liquid with additional absorbent and place in a chemical waste container.

For spill in water. Absorb the spill with inert material. Remove contaminated water and dispose of according to Section 13.

7. HANDLING AND STORAGE REQUIREMENTS

Handling: Avoid contact with eyes and skin. Avoid inhalation of fumes and only use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking or using the toilet. Operators should change and wash clothing daily. Remove clothing immediately if the products get inside. Wash skin thoroughly using non-abrasive soap and put on clean clothing. Do not apply directly to areas where surface water is present. Water used to clean equipment must be disposed of correctly to avoid contamination.

Storage: Store in its original containers in an isolated, dry, cool and well-ventilated area. Store away from incompatible substances. Keep under lock and key out of reach of unauthorized persons, children and animals. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Acceptable Daily Intake (ADI): No data available.

Engineering Controls: It is essential to provide adequate ventilation. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations.

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: Employee must wear appropriate chemical-resistant gloves to prevent contact with this substance.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White Powder

Odour: Pungent, mercaptan type.

Storage Stability: It is stable in normal warehouse conditions for two years.

10. STABILITY AND REACTIVITY

Stability: Stable for 2 years under normal storage.

Conditions to Avoid: No data available.

Incompatible Materials: The product must not be mixed with alkali pesticides.

Decomposition Products: No data available.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): >2 000 mg/kg. Slightly toxic. The degree of injury differs according to the amount of material ingested and the time of first aid.

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

Acute Inhalation LC₅₀ (rat, 4 hr): >15 mg/l. Slightly toxic. The degree of injury differs according to the amount of material inhaled and the time of first aid.

Skin and Eye Irritation (rabbit): Slightly irritating to skin and eyes.

Skin Sensitization (guinea pig): Not a skin sensitizer.

Chronic Dietary Study: The dermal administration of Acephate tech to rats, five days per week for three weeks, at doses up to 300 mg/kg/day produced statistically significant inhibition of cholinesterase activity in the brain of males and females treated with the highest dose (300 mg/kg/day) and in females at the mid-dose (60 mg/kg/day). The degree of inhibition was less than 15% in all cases and no clinical signs of toxicity were observed.

Carcinogenicity: There is no evidence of carcinogenicity in human beings

Mutagenicity: Acephate did not cause any mutations in animals and there is no any evidence of mutagenicity in human beings.

Neurotoxicity: There is no evidence of neurotoxicity in human beings.

Reproductive Hazard: There is no evidence that Acephate 75% SP causes any reproductive effects or birth defects in human beings.

12. ECOLOGICAL INFORMATION

Ecotoxicity is based on the active ingredient toxicity.

Aquatic Toxicity Fish LC₅₀ (96 hr): >1 000 mg/l (rainbow trout); 2 050 mg/l (bluegill sunfish). Toxic to fish.

Aquatic Toxicity Daphnia EC₅₀ (48 hr): Toxic to Daphnia magna.

Aquatic Toxicity Algae EC₅₀ (5 days): No data available.

Avian Toxicity LD₅₀ (14 days): 350 mg/kg (mallard duck); 83.9 mg/kg (pigeon). Toxic to birds.

Bee Toxicity LD₅₀: 1.2 µg/bee. Toxic to bees.

Biodegradability: This product in formulation can be classified as non-persistent.

Bio-accumulation: Contamination of ground water is unlikely to occur, accumulation in the air or contamination by wet or dry deposition are not to be expected.

Mobility: No data available.

13. DISPOSAL CONSIDERATION

Pesticide Disposal: 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 or in accordance with applicable local procedures. Comply with any local legislation applying to waste disposal. Do not contaminate water, food, or feed by storage or disposal.

Package Product Wastes: Emptied containers retain product residues. Do not re-use product containers. Observe all labelled safeguards until container is cleaned, reconditioned or destroyed. Combustible container should be disposed of in pesticide incinerators or buried in an approved landfill. Non-combustible containers must first be triple-rinsed with water.

14. TRANSPORT INFORMATION

UN No.: 2783

Class: 6.1

Packaging Group: III

Proper Shipping Name: Organophosphorus pesticides; solid; toxic (Acephate)

15. REGULATORY INFORMATION

Risk Phrases: R7- May cause fire.

R22- Harmful if swallowed.

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

S15- Keep away from heat.

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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