

Safety Data Sheet

TEBUROX - Reg. No: L 9658 (Act No 36 of 1947)

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1) PRODUCT AND COMPANY IDENTIFICATION	
Product name:	Teburox
UN No:	3082
Distributed by:	MERIDIAN AGRITECH P O BOX 436 MODDERFONTEIN TEL 011 8228509 FAX 011 8223494 MOBILE: 0834006056 www.agritech.co.za
Emergency Number:	POISON CENTRE (UNITAS HOSPITAL) 012 664 1100 TYGERBERG: 021 931 6129 RED CROSS: 021 689 5227 RAPID SPILL RESPONSE 0800 775 3305 GRIFFON POISON CENTRE: 082 446 8946
Chemical Name:	1-(5- <i>tert</i> -butyl-1,3,4-thiadiazol-2-yl)-1,3-dimethylurea
2) Hazards Identification:	
Health effects: eyes:	Irritating to eyes
Health effects: skin:	Irritating to skin
Health effects: ingestion	Toxic if ingested in large amounts
Health effects: inhalation	No information available
3) Composition Details:	
COMPOSITION	Tebuthiuron
	500 g/L
4) First Aid Measures:	
Inhalation:	Remove victim to fresh air. Keep patient calm. Monitor for respiratory distress. If a cough or breathing difficulty develops, evaluate for respiratory tract irritation, bronchitis or pneumonitis. Seek medical attention if irritation develops or persists.
Skin contact:	Immediately remove contaminated clothing and flush body and clothes with large amounts of water. Wash thoroughly with soap and water (including hair, skin and fingernails) Wash contaminated clothing before re-use. Seek medical assistance if irritation persists. Persons providing first aid must wear gloves to avoid self-contamination.
Eye contact:	Flush eyes with plenty of clean, room temperature water for at least 15 minutes holding eyelids open. Remove contact lenses. Call a doctor for treatment advice. Obtain medical attention immediately if irritation persists. If irritation, pain, swelling, lacrimation, or photophobia persists after 15 minutes of irrigation, an ophthalmologic examination must be performed.
Ingestion	Seek medical attention. Do not induce vomiting. Never induce vomiting or give anything by mouth to a victim who is unconscious or is having convulsions. <u>There is no specific antidote if this product is ingested. Treat symptomatically (decontamination, vital functions).</u>

Advice to physician:

Carefully observe the patient with inhalation exposure for the development of any systemic signs or symptoms and administer symptomatic treatment where necessary. Administer 100% humidified supplemental oxygen with assisted ventilation as needed.

Exposed skin and eyes must be copiously flushed with water.

There is no specific antidote for poisoning. In the case of suicidal ingestions, particularly, then the possibility that multiple toxic substances may have been swallowed must be kept in mind.

1. If large amounts of this product have been ingested, and if the patient is fully alert, induce emesis with Syrup of Ipecac, followed by several glasses of water.
Dosage for adults and children over 12 years of age: 30 mL.
Dosage for children under 12 years of age: 15 mL
When the vomiting has stopped, administer activated charcoal. Add sorbitol to the charcoal slurry unless diarrhoea has already started. If the patient is not fully alert, place an endotracheal tube to protect the airway, then aspirate and lavage the stomach with an activated charcoal slurry. Leave a quantity of charcoal with sorbitol in the stomach before withdrawing the stomach tube. Repeated administration of activated charcoal at half or more of the initial dosage every 24 hours may be beneficial.
2. If only a small amount was ingested, if effective emesis has already occurred, or if the treatment is delayed, administer the activated charcoal and sorbitol by mouth.
3. If serious dehydration and electrolyte depletion have occurred due to vomiting and diarrhoea, monitor the blood electrolytes and fluid balance and administer intravenous infusions of glucose, normal saline, Ringer's solution or Ringer's-lactate to restore the extracellular fluid volume and electrolytes. Follow up with oral nutrients as soon as fluids can be retained. Fluids will serve to support the excretion of toxicants.
4. Supportive measures are usually sufficient for successful management of excessive exposures to tebuthiuron. If the patient's deteriorates despite good supportive care, then the operation of an alternative or an additional toxicant should be suspected.

5) Fire-Fighting Measures:

<p>Flash point:</p> <p>Extinguishing Media:</p> <p>Fire Fighting:</p>	<p>Not flammable</p> <p>Small fires: Carbon dioxide, dry powder, halon or alcohol resistant foam.</p> <p>Large fires: Water spray or fog can be used to cool unaffected stock. Avoid the accumulation of polluted run-off from the site. Remove the container from the fire if possible and without risk.</p> <p>Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a recommended extinguishing agent for the type of surrounding fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Keep upwind.</p> <p>Avoid inhaling hazardous vapours and fumes from burning materials. Do not scatter the material. Keep the material away from water sources and sewers. Do not touch the material and avoid breathing dusts and fumes.</p> <p>Eliminate all ignition sources in the immediate area.</p>
<p>Protective clothing:</p>	<p>Full protective clothing and self-contained breathing apparatus</p>
<p>6) Accidental Release Measures:</p>	
<p>Personal precautions:</p> <p>Occupational spill:</p>	<p>Avoid contact with skin and eyes. Do not breath in dusts or fumes. For personal protection see Section 8.</p> <p>Do not eat, drink or smoke during the clean up process. Clear area of unprotected personnel. Wear protective gear: goggles.</p> <p>Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Sections 7 and 8.</p> <p>For small spillages: Pick up with a suitable absorbent material (damp earth, sand or other suitable absorbent such as sawdust). Place the material into a clean, dry, correctly labelled container and seal for later disposal. Do not flush the spilled product into drains.</p> <p>For large spillages: Dike the spillage and pump off the product</p> <p>Dispose of absorbed materials according to local regulations. Collect waste into suitable containers, which can be labelled and sealed. Clean contaminated floors and objects thoroughly with water and a detergent, while observing environmental regulations.</p>
<p>7) Handling & Storage:</p>	
<p>Handling:</p> <p>Storage:</p>	<p>KEEP OUT OF REACH OF CHILDREN and animals. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. After work, rinse gloves and remove protective equipment. Wash hands thoroughly with soap and water after handling, and before eating, tobacco use, drinking, or using the toilet. Wash contaminated clothing before re-use and separate from household laundry.</p> <p>Store in original container only in a well-ventilated, cool, dry, secure area away from children, foods and animal feeds. Protect from heat, moisture and direct sunlight.</p>
<p>8) Exposure Control / Personal Protection:</p>	

<p>It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.</p> <p><u>PERSONAL PROTECTIVE EQUIPMENT:</u></p> <p>Clothing:</p> <p>Respiratory protection:</p> <p>Gloves:</p> <p>Eye protection:</p> <p>Emergency eye wash:</p>	<p>Avoid contact with skin, eye and clothing. Closed working clothes are recommended. Take off contaminated clothing immediately. Store work clothing separately. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke at the place of work. Wash hands and/or face before breaks and at the end of the shift.</p> <p>Consult supplier to confirm that the equipment is suitable</p> <p>The employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this product.</p> <p>An approved respirator suitable for protection from dusts and mists of pesticides is adequate. The limitations of the respirator as specified by the approving agency and the manufacturer must be observed.</p> <p>Suitable synthetic chemically resistant gloves.</p> <p>Safety goggles with side shields, or face shield.</p> <p>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.</p>
<p>9) Physical & Chemical Properties:</p>	
<p>Form:</p>	<p>Liquid</p>
<p>Colour:</p>	<p>White</p>
<p>Odour:</p>	<p>Characteristic</p>
<p>Solubility:</p>	<p>Suspends in water</p>
<p>pH:</p>	<p>8.1</p>
<p>10) Stability & Reactivity:</p>	
<p>Stability:</p> <p>Hazardous decomposition product(s):</p>	<p>Stable under normal use and standard conditions. Stable for 24 months. Stable in aqueous media between pH 5 and 9. Hydrolysed at higher temperatures by strong alkalis and strong acids.</p> <p>No decomposition if stored and handled as indicated. Thermal decomposition may release toxic oxides of carbon, nitrogen and sulphur.</p>
<p>11) Toxicological Information:</p>	
<p>Ingestion: Oral LD50 (Rat): > 1000 mg/kg Dermal: LD50 (Rat): > 3000 mg/kg Inhalation: LC50 (Rat, 4 hours) (Technical material): LC50 for rats 3.696 mg/l. Eye Contact: Eye irritant Skin Contact: Skin irritant Skin Sensitization: Not a Sensitizer (Guinea Pig).</p>	
<p>12) Ecological Information: Based on tebuthiuron technical material</p>	
<p>Birds: Acute oral LD50 for chickens, bobwhite quail, and mallard ducks >500 mg/kg. In 1 mo feeding trials, chickens receiving 1000 mg/kg showed no ill-effects. Bees: LD50 >100 µg/bee Fish: LC50 (96 h) for rainbow trout 144, goldfish and fathead minnows >160, bluegill sunfish 112 mg/l. Daphnia: LC50 297 ppm Algae: EC50 for <i>Anabaena</i> 4.06, <i>Navicula</i> 0.081, <i>Selenastrum</i> 0.05, <i>Skeletonema</i> 0.05 ppm.</p> <p>Environments fate Tebuthiuron is a highly active, non-selective herbicide that works via root-uptake in plants. Small quantities of tebuthiuron in contact with the roots of desirable vegetation will result in severe injury or death of these plants. Do not contaminate water sources by disposing of waste or equipment wash water. Some microbial breakdown occurs in soil, but this is not the predominant mode of degradation. Loss due to photodecomposition and volatilisation is negligible. Half-life in soil is considerably greater in soils with low moisture content, and in high organic soils. Adsorption Freundlich K values range from 0.11 in sand (pH 7.7, o.m. 0.5%) to 1.82 in clay loam (pH 6.9, o.m. 2.0%).</p>	
<p>13) Disposal Considerations:</p>	

Waste Disposal :

Contaminated absorbents, used containers, surplus product etc. should be burnt at > 1000 °C in an incinerator, preferable designed for pesticide disposal. In the case where no incinerator is available, hydrolysis under alkaline conditions is a suitable method of disposal of small quantities of the product. Prior to disposal of the resultant waste, the material must be analysed in order to ensure that the active ingredient has been degraded to a safe level. Treated waste must be buried in an approved landfill. **Never** pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into the water systems. Disposal of waste must be done in compliance with local legislation. Spilled product cannot be re-used and must be disposed of.

Container Disposal :

If containers cannot be recycled, they should be disposed of together with the waste chemical
Do not reuse empty containers. Empty containers retain product residue. Triple rinse, or equivalent, empty container, return rinse water to dilution mixture, and dispose of dilution mixture as a hazardous waste if it cannot be disposed of by use according to label instructions. Dispose of empty containers in accordance with local regulations. Consult provincial environment ministry for advice on waste disposal. Industrial/commercial waste may be handled at licensed facilities only. Waste shipments must be securely packaged and properly labelled. Only licensed carriers may be used for transport. Combustible containers should be disposed of in approved pesticide incinerators. Non-combustible containers must first be triple-rinsed with water.

14) Transportation Information:

UN NUMBER: 3082

Road Transport ADR/ RID:

Class: 9 Miscellaneous Dangerous Goods

Packaging group: III

Shipping name: Environmentally hazardous substance, liquid N.O.S (Tebuthiuron).

Maritime Transport IMDG / IMO:

Class: 9 Miscellaneous Dangerous Goods

Packaging group: III

Shipping name: Environmentally hazardous substance, liquid N.O.S (Tebuthiuron).

Air transport: ICAO/IATA

Class: 9 Miscellaneous Dangerous Goods

Packaging group: III

Shipping name: Environmentally hazardous substance, liquid N.O.S (Tebuthiuron).

15) Regulatory Information:**Symbol(s):**

Symbol(s): Xn – Harmful.

N – Environmentally Hazardous Substance

R-phrase(s): R22 – Harmful if swallowed.

R50/53 – Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s): S2 – Keep out of reach of children.

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

S20 – When using, do not eat or drink.

S24/25 – Avoid contact with skin and eyes.

S36/37 – Wear suitable protective clothing and gloves.

S46 – If swallowed, contact a doctor or Poisons Information Centre immediately and show this container or label.

S60 – This material and its container must be disposed of as hazardous waste.

S61 – Avoid release to the environment. Refer to special instructions or the Safety data sheet.

16. Other Information

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear.

It is the responsibility of persons in receipt of this SDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with this product. If the recipient subsequently produces formulation(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this SDS to their own SDS.

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