

Section 1 - Identification of The Material and Supplier

Ensystem South Africa (Pty) Ltd
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Chemical nature:	Insecticide smoke generator containing deltamethrin
Trade Name:	FUMITHOR™ DELTA Insecticide Smoke Generator
Product Code:	Reg. No. L11061
Product Use:	Insecticide for use in commercial, industrial, agricultural, domestic and public services buildings, including food handling establishments.
Creation Date:	February 2014
This version issued:	October 2022 and is valid for 5 years from this date.

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: Acute toxicity (oral) – category 5, Eye irritation – category 2, Hazardous to the aquatic environment – category 1

DG Classification: None allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMSBC criteria. **IATA:** Non-Hazardous for Air Transport.

UN Number: None allocated.



GHS Signal word: **WARNING**

HAZARD STATEMENT:

- H303: Maybe harmful if swallowed.
- H319: Causes serious eye irritation.
- H410: Very toxic to aquatic life with long lasting effects.

PREVENTION

- P102: Keep out of reach of children.
- P210: Keep away from heat, hot surface, sparks, open flames and other ignition sources – No smoking.
- P261: Avoid breathing dusts / fume / smoke.
- P264: Wash contacted areas thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P273: Avoid release to the environment.
- P281: Use personal protective equipment as required.

RESPONSE

- P312: Call a POISON CENTRE or doctor if you feel unwell.
- P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313: IF eye irritation persists: Get medical advice/attention.
- P391: Collect spillage.

STORAGE

- P402: Store in a dry place.
- P410: Protect from sunlight.
- P403+P233: Store in a well-ventilated place. Keep container tightly closed.

DISPOSAL

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P501: Dispose of contents and containers as specified on the registered label.

Emergency Overview

Physical Description & colour: Ring-pull metal tin with label containing a light grey powder.

Odour: Characteristic odour.

Major Health Hazards: Symptoms and consequences of deltamethrin poisoning include: sweating, fever, anxiety and rapid heartbeat. If swallowed, symptoms are likely to include feeling sick, vomiting, diarrhoea, twitching of arms and legs, and convulsions if poisoning is severe. Studies have shown many cases of dermal deltamethrin poisoning after agricultural use with inadequate handling precautions, and many cases of accidental or suicidal poisoning by the oral route at doses estimated to be 2-250 mg/kg. Oral ingestion caused epigastric pain, nausea, vomiting and coarse muscular fasciculations. With doses of 100-250 mg/kg, coma was caused within 15-20 minutes. Harmful by inhalation and if swallowed, repeated exposure may cause skin dryness or cracking, vapours may cause drowsiness.

Potential Health Effects

Inhalation:

Short term exposure: May cause anesthetic or narcotic effect.

Long Term exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short term exposure: May cause an allergic skin reaction. However, this product is packed in metal tin, it should present no hazard in normal use.

Long Term exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short term exposure: This product causes eye irritation.

Long Term exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short term exposure: Significant oral exposure is considered to be unlikely. Available data shows that this product maybe harmful. This product may be irritating to mucous membranes.

Long Term exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: Deltamethrin is Class 3 - unclassifiable as to carcinogenicity to humans.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc,%	TWA (mg/m ³)	STEL (mg/m ³)
Deltamethrin	52918-63-5	2	not set	not set
Potassium chlorate	3811-04-9	20-50	not set	not set
Ammonium chloride	12125-02-9	10-20	10	20
Other non-hazardous ingredients		to 100	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non-hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5-day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

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Section 4 - First Aid Measures

General Information:

In case of human or animal poisoning, call the Griffon Poison Centre 082-446-8946 (24 hr service). Have this SDS with you when you call.

Inhalation: If symptoms of poisoning become evident, contact a Poisons Centre, or call a doctor at once. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

Skin Contact: Wash skin vigorously and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until product is removed. Do not use solvents or oils.

Eye Contact: Quickly and gently brush particles from eyes. Flush contaminated eye(s) with lukewarm, gently flowing water for 15 minutes or until the product is removed, while holding eyelids open. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

Ingestion: If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Centre, or call a doctor immediately. Keep calm.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: There is a moderate risk of an explosion from this product if commercial quantities are involved in a fire. Fire-fighters should take care and appropriate precautions. Fire decomposition products from this product are likely to be toxic if inhaled. This product is a smoke generation device and when ignited will give off smoke containing deltamethrin. Take appropriate protective measures.

Extinguishing Media: In case of fire, use carbon dioxide, dry chemical, foam.

Fire Fighting: When fighting fires involving significant quantities of this product, wear a fully encapsulated splash suit complete with self-contained breathing apparatus. Cool undamaged containers exposed to fire with water spray.

Flash point: 87 °C

Upper Flammability Limit: No data.

Lower Flammability Limit: No data.

Autoignition temperature: No data.

Flammability Class: No data.

Section 6 - Accidental Release Measures

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including eye/face protection. All skin areas should be covered. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Use impermeable gloves with care. Eye/face protective equipment should comprise as a minimum, protective goggles. If there is a significant chance that dusts are likely to build up in clean-up area, we recommend that you use a suitable Dust Mask. Otherwise, not normally necessary. Stop leak if safe to do so, and contain spill. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Consider vacuuming if appropriate. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this SDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: This product is a Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Keep containers dry and away from water. Keep containers of this product in a well ventilated area. Keep away from heat and flame. Keep away from sources of ignition such as sparks and open flames. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Check packaging - there may be further storage instructions on the label.

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Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

SWA Exposure Limits

	TWA (mg/m ³)	STEL (mg/m ³)
Ammonium chloride	10	20

The ADI for deltamethrin is set at 0.01 mg/kg/day. The corresponding NOEL is set at 1 mg/kg/day. ADI means Acceptable Daily Intake; NOEL means No-observable-effect-level. Data from Australian ADI List, June 2013.

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: This product should only be used where there is ventilation that is adequate to keep exposure below the TWA levels.

Eye Protection: Eye protection such as protective glasses or goggles is recommended when product is being used.

Skin Protection: You should avoid contact even with mild skin irritants. Therefore you should wear suitable impervious elbow-length gloves and facial protection when handling product. See below for suitable material types.

Protective Material Types: There is no specific recommendation for any particular protective material type.

Respirator: The use of a half-face piece respirator is recommended during and after application of the product, including during early re-entry into the treated area.

Section 9 - Physical and Chemical Properties:

Physical Description & colour: Ring-pull metal tin with label containing a light grey powder.

Odour: Characteristic odour

Boiling Point: Not available

Freezing/Melting Point: No specific data. Solid at normal temperatures

Volatiles: No data

Vapour Pressure: No data

Vapour Density: Not applicable

Density: 0.89 g/cm³

Water Solubility: Insoluble

pH: No data

Volatility: No data

Evaporation Rate: Not applicable

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: This product should be kept in a cool place, preferably below 30 °C. Keep containers tightly closed. Containers should be kept dry. Keep containers and surrounding areas well ventilated.

Incompatibilities: Strong oxidising agents.

Fire Decomposition: Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. May form nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. May form oxides of sulphur (sulphur dioxide is a respiratory hazard) and other sulphur compounds. Most will have a foul odour. May form hydrogen chloride gas, other compounds of chlorine. Potassium compounds, deltamethrin. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Toxicity: An information profile for deltamethrin is available at <http://extoxnet.orst.edu/pips/ghindex.html>

Acute Toxicity: The acute oral LD₅₀ in male rats ranged from 128 mg/kg to greater than 5,000 mg/kg depending on the carrier and conditions of the study; the LD₅₀ for female rats was 52 mg/kg and other published values range from 31 to 139 mg/kg. The acute dermal LD₅₀ for rabbits was greater than 2,000 mg/kg. No skin irritation and slight eye irritation were reported.

Reproductive Effects: Oral administration of deltamethrin to mice on days 7 to 16 of gestation produced a dosage related reduction of weight gain but no effect on the number of implants, foetal mortality, foetal weight or malformations.

Teratogenic Effects: No reported teratogenicity in mice, rats or rabbits. Deltamethrin has no teratogenic activity.

Mutagenic Effects: No mutagenic effects in mice, rats or rabbits. Deltamethrin has no mutagenic activity.

Carcinogenic Effects: No information available.

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Classification of Hazardous Ingredients

Ingredient

Risk Phrases

No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations

Section 12 - Ecological Information

Very toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment. This product is unlikely to adversely affect the environment.

Effects on Birds: 8-day LC₅₀ for ducks >4,640 mg/kg diet; and 10,000 mg/kg diet for quail.

Effects on Aquatic Organisms: As is common with many pyrethroids, deltamethrin has a high toxicity to fish under laboratory conditions. In field conditions, fish are not harmed. In laboratory trials, the LC₅₀ for fish was 1-10 µg/L. Aquatic fauna, particularly crustacea, may be affected, but fish are not harmed under normal conditions of use.

Effects on Other Animals (Non-target species): Deltamethrin is considered toxic to bees.

ENVIRONMENTAL FATE

Breakdown of Chemical in Soil and Groundwater: In soil, degradation occurs within 1-2 weeks.

Breakdown of Chemical in Surface Water: Deltamethrin in pond water was rapidly adsorbed, mostly by sediment, in addition to uptake by plants and evaporation into the air.

Breakdown of Chemical in Vegetation: About 10 days after use, there are no deltamethrin residues observed on plants. There is no known phytotoxicity to crops.

Section 13 - Disposal Considerations

Disposal: Dispose of used generator safely, wrap empty can in paper and place in waste bin. Do not re-use can.

Section 14 - Transport Information

Transport: This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

IATA: Non-Hazardous for Air Transport.

Section 15 - Regulatory Information

Regulatory: Product is registered with Department of Agriculture, forestry and fisheries. Registration number L11061.

Section 16 - Other Information

If there is any conflict between this SDS and the registered label, directions on the label prevail.

Acronyms:

CAS number	Chemical Abstracts Service Registry Number
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services
IARC	International Agency for Research on Cancer
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
UN Number	United Nations Number

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS

OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

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