

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product:	Mosquito Repellent Coil
----------	-------------------------

Supplier Information

Company Name: Coghlan's Ltd.
Address: 121 Irene Street.
 Winnipeg, MB
 CANADA, R3T 4C7
Tel: (204) 284-9550
Fax: (204) 475-4127
Email: info@coghlans.com
Emergency Telephone: 1-877-264-4526

SECTION 2 – HAZARDS IDENTIFICATION

Primary Route of Entry:	Inhalation
Emergency Overview:	Avoid prolonged, direct inhalation of smoke. May cause respiratory irritation if inhaled when ignited. Contact with ignited product will burn skin. Prolonged exposure to ignited material through inhalation may cause headache and/or nausea.

SECTION 3 – HAZARDOUS INGREDIENT

Active Ingredient	% Conc.	CAS Number	LD ₅₀	LC ₅₀
d-cis trans Allethrin	0.25% w/w	584-79-2	Oral - 2,150 mg/kg (male rat), 900 mg/kg (female rat) Dermal - 2,660 mg/kg (male rabbit), 4,390 mg/kg (female rabbit)	>3,875 mg/m ³ (Inhalation, 4 Hr., rat)

SECTION 4 – FIRST AID MEASURES

EYE CONTACT:	If irritation develops, flush eyes with clean water, holding eyelids apart for a minimum of 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eyes. Obtain medical attention if irritation persists.
SKIN CONTACT:	Wash hands thoroughly with soap and water after handling the product. Obtain medical attention if irritation occurs.
INHALATION:	Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is laboured, give oxygen.
INGESTION:	If swallowed, immediately contact a poison control centre, doctor or nearest hospital for treatment advice. Provided the patient is conscious, wash out mouth with water. Do not give anything by mouth to an unconscious person. Do not induce vomiting unless directed by a physician or a poison control center. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomits, rinse mouth and administer water.

NOTES TO PHYSICIAN: There is no specific antidote. If a large amount has been swallowed and emesis has been inadequate, lavage stomach. Treat symptomatically.
MEDICAL CONDITIONS KNOWN TO BE AGGRAVATED: Individuals with allergic history or pre-existing dermatitis should use extra care in handling this product.

SECTION 5 – FIRE FIGHTING MEASURES

FLAMMABLE	This product is ignited and allowed to smolder to release mosquito repelling fumes.	
Means of Extinction:	For individual units:	Submerge in water or cover with sand.
	For Bulk shipments:	Use foam, carbon dioxide, dry powder, halon extinguishant or water fog or mist, (avoid use of water jet). Wear full protective clothing and 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. Contain run-off water with, for example, temporary earth barriers.
Flashpoint(°C) and Method: Approx. 65°C (TCC)	Explosion Data – Sensitivity to Impact: No	Explosion Data – Sensitivity to Static Discharge: No
Combustion Hazard:	During a fire involving bulk materials, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.	

SECTION 6 – ACCIDENTAL RELEASE MEASURES (For Bulk Material Spills ONLY)

Personal precautions:	Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices. A small spill can be handled routinely. Wear suitable protective clothing and eye protection to prevent skin and eye contact. Use adequate ventilation and wear an air-supplied respirator to prevent inhalation.
Procedures for dealing with release or spill:	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. Scoop or sweep up material, keeping dust to a minimum, and place into a disposable container. Wash area with detergent and water. Pick up wash liquid with additional absorbent and place into compatible disposal container. On soils, skim off the upper contaminated layer and collect for disposal. Once all material is cleaned up and placed in disposal container, seal container and arrange for disposition. Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

SECTION 7 – HANDLING AND STORAGE

Handling Precaution:	KEEP OUT OF REACH OF CHILDREN and animals. Wash hands thoroughly with soap and water after handling, and before eating, tobacco use, drinking, or using the toilet. Keep containers closed when not in use.
Storage Requirements:	Store in original container only in a well-ventilated, cool, dry, secure area. Protect from heat, sparks and flame. Keep separate from other products and food. Clean up spilled material immediately.

SECTION 8 – EXPOSURE CONTROLS/ PERSONAL PROTECTION

EXPOSURE CONTROL:	This product is intended for use outdoors where engineering controls are not necessary. Ensure work areas have ventilation, containment, and procedures sufficient to maintain airborne levels below the TLV. Avoid breathing dust, vapours or smoke/fumes. Avoid contact with eye. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.
EYES:	Where eye contact is likely, wear chemical goggles or a full-face shield.
SKIN:	Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves.
INHALATION:	A respirator is not normally required when handling this substance. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits. A NIOSH-certified combination air-purifying respirator with an N, P or R 95 or HE class filter and an organic vapour cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid	Odour and Appearance: Woody, green coils	Vapour Density (air =1): 1.009 g/mL @ 20°C (d-cis trans Allethrin, Technical)	Vapour Pressure (mmHg): 0.17mPa @ 21.6°C (d-cis trans Allethrin, Technical)
Specific Gravity: 19.3 – 22.6 lbs/ft. ³		Coefficient of Water/Oil Distribution: Log Pow = 4.95 (d-cis trans Allethrin, Technical)	Solubility in Water: 5 mg/L @ 25°C (d-cis trans Allethrin, Technical)

SECTION 10 – STABILITY & REACTIVITY

Reactivity:	None Known
Hazardous Decomposition Products:	During a fire involving bulk materials, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

SECTION 11 – TOXICOLOGICAL INFORMATION

Effects of Acute Exposure:	Prolonged exposure through inhalation may cause headache and/or nausea.	
Acute Toxicity/Irritation Studies: (Finished Product)	Ingestion:	Practically Non-Toxic – Oral, LD ₅₀ Rat: >5,250mg/kg body weight
	Dermal:	Practically Non-Toxic – Dermal, LD ₅₀ Rat: >4,200mg/kg body weight
	Inhalation:	Practically Non-Toxic – Inhalation, LC ₅₀ Rat: >4.766 g/m ³ 4 hr.
	Note: This study has taken into account any acute hazards related to the “other components” in the formulation.	
Effects of Chronic Exposure:	Prolonged exposure to ignited material through inhalation may cause headache and/or nausea.	
Carcinogenicity – IARC: (d-cis trans Allethrin, Technical)	Not carcinogenic in the rat or mouse (2-year feeding bioassay)	
Reproductive Toxicity: (d-cis trans Allethrin, Technical)	NOEL (No Observable Effect Level): Dietary - 6,000 ppm (rat, reproduction), 200 ppm (rat, parent and fetus)	
Embryotoxicity (d-cis trans Allethrin, Technical)	NOEL (No Observable Effect Level): 100 mg/kg/day (rat)	
Mutagenicity: (d-cis trans Allethrin, Technical)	Negative in Ames test, in vitro Chromosomal aberration test in mammalian cells, Unscheduled DNA synthesis in mammalian cells.	

SECTION 12 – ECOLOGICAL INFORMATION

Eco-Acute Toxicity: (d-cis trans Allethrin, Technical)		
Bees LC ₅₀ /EC ₅₀	Invertebrates (Daphnia pulex) 48-hour LC ₅₀ /EC ₅₀	Fish (Cyprinus carpio) 96-hour LC ₅₀ /EC ₅₀
“Toxic”	0.021 mg/L	0.134 mg/L

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal:	Do not reuse empty containers. Dispose of empty containers in accordance with local regulations and label directions. 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 labeled.
-----------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

SECTION 14 – TRANSPORT INFORMATION

TRANSPORTATION OF DANGEROUS GOOD CLASSIFICATION, ROAD/RAIL	The goods are not subject to TI
TRANSPORTATION OF DANGEROUS GOOD CLASSIFICATION, BY SEA	The goods are not subject to IMDG.

SECTION 15 – REGULATORY INFORMATION

United States Environmental Protection Agency Registration No.: 5178-5

SECTION 16 – OTHER INFORMATION

Disclaimer: The information contained herein is accurate to the best of our knowledge. My Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.