

# Material Safety Data Sheet

## AEROTHOR\* Extra Strength Crawling Insect Spray

### Section 1 - IDENTIFICATION OF CHEMICAL PRODUCT AND COMPANY

Classified as Hazardous according to the criteria of NOHSC Australia.

Classified as Dangerous Goods according to the Australian Dangerous Goods (ADG) Code.

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**Substance:** Imiprothrin and cypermethrin are pyrethroid insecticides.

**Trade Name:** AEROTHOR\* Extra Strength Crawling Insect Spray.

**Product Use:** Aerosol insecticide for use as described on the product label.

**Creation Date:** October, 2008

**Revision Date:** October 2008

### Section 2 - HAZARDS IDENTIFICATION

<b>Risk Phrases:</b>	R12 Extremely Flammable. R65 Harmful: May cause lung damage if swallowed.
<b>Safety Phrases:</b>	S16 Keep away from sources of ignition - No smoking. S2 Keep out of reach of children. S23 Do not breathe gas/fumes/vapour/spray (where applicable). S24 Avoid contact with skin. S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.
<b>ADG Classification:</b>	Classified as Dangerous Goods by the criteria of the ADG Code. UN No: 1950 2.1 DG Class: None Allocated Subsidiary Risk(s): None Allocated Pkg Group: None Allocated Hazchem Code: 2Y EPG: 2D1

### Emergency Overview

<b>Physical Description &amp; colour:</b>	Clear, colourless liquid.
<b>Odour:</b>	Mild solvent odour.
<b>Major Health Hazards:</b>	If aspirated, may cause lung damage, repeated exposure may cause skin dryness.

### Potential Health Effects

**Inhalation:**

**Short term exposure:** Available data indicates that this product is not harmful. Product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort. Intentional misuse by deliberately concentrating and inhaling contents of aerosol containers can be harmful or fatal.

**Skin Contact:**

**Short term exposure:** Major health effect from this product is misuse of the aerosol function. If sprayed continuously on skin or in eyes, it can cause frostbite.

**Eye Contact:**

**Short term exposure:** Available data shows that this product is not harmful. If sprayed directly in the eye, this product will irritate. If spraying is prolonged, it may cause damage through frostbite.

**Ingestion:**

**Short term exposure:** Significant oral exposure is considered to be unlikely. Because of the low viscosity of this product, it may directly enter the lungs if swallowed, or if subsequently vomited. Once in the lungs, it is very difficult to remove and can cause severe injury. However, this product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident, but all should disappear once exposure has ceased.

**Carcinogen Status:**

**NOHSC:** No significant ingredient is classified as carcinogenic by NOHSC.

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

**IARC:** No significant ingredient is classified as carcinogenic by IARC.

**Section 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

Ingredients	CAS No	Conc, %	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
Butane	106-97-8	<60%	Not set	Not set
Ethanol	64-17-5	30 - 60%	Not set	Not set
Propane	74-98-6	<60%	Not set	Not set
Solvent naphtha (petroleum), medium Aliphatic	64742-88-7	10-30%	Not set	Not set
Cypermethrin	52315-07-8	0.20%	Not set	Not set
Imiprothrin	72963-72-5	0.14%	Not set	Not set

This is a commercial product whose exact ratio of components may vary slightly.

**Section 4 - FIRST AID MEASURES**

**General Information:**

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is **13 11 26** from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call.

**Inhalation:** First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

**Skin Contact:** Quickly and gently blot away excess liquid. Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 10 minutes or until chemical is removed. If irritation persists, repeat flushing and obtain medical advice.

**Eye Contact:** Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed, while holding the eyelid(s) open. Obtain medical advice immediately if irritation occurs. 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 Information Centre, or call a doctor.

**Section 5 - FIRE FIGHTING MEASURES**

**Fire and Explosion Hazards:** This product is classified as flammable. 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. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

**Extinguishing Media:** Suitable extinguishing media are carbon dioxide, dry chemical, foam, water fog. Water fog or fine spray is preferred for large fires. Try to contain spills, minimise spillage entering drains or water courses.

**Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade. There is a danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is full fire kit and breathing apparatus.

**Hazchem Code:** 2Y

## Section 6 - ACCIDENTAL RELEASE MEASURES

**Accidental release:** This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern. For minor spills, clean up, rinsing to sewer and put empty container in garbage. Although no special protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling chemical products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services.

## 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 MSDS for details of personal protective measures, and make sure measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

**Storage:** This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Store in a cool, well ventilated area, and make sure that surrounding electrical devices and switches are suitable. Check containers and valves periodically for leaks. If you keep more than 25kg of flammable gases, you are probably required to license the premises or notify your Dangerous Goods authority. If you have any doubts, we suggest you contact your Dangerous Goods authority in order to clarify your obligations. Check packaging - there may be further storage instructions on the label.

## 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**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

No special equipment is usually needed when 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 be used in a well ventilated area.

**Eye Protection:** Eye protection such as protective glasses or goggles is recommended when this 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 this product. See below for suitable material types.

**Protective Material Types:** We suggest that protective clothing be made from: nitrile, butyl rubber.

**Respirator:** Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear liquid (aerosol dispensed)	<b>Solubility (water):</b>	Insoluble
<b>Odour:</b>	Solvent-like odour	<b>Specific gravity:</b>	0.58 (approximately)
<b>pH:</b>	Not available	<b>% Volatiles:</b>	Not available
<b>Vapour pressure:</b>	Not available	<b>Flammability:</b>	Highly flammable
<b>Vapour density:</b>	Not available	<b>Flash point:</b>	-104°C to -60°C (propellant)
<b>Boiling point:</b>	Not available	<b>Upper explosion limit:</b>	Not relevant
<b>Melting point:</b>	Not available	<b>Lower explosion limit:</b>	Not relevant
<b>Evaporation rate:</b>	Not available	<b>Autoignition temperature:</b>	Not available

## Section 10 - STABILITY AND REACTIVITY

**Reactivity:** This product is unlikely to react or decompose under normal storage conditions.

**Conditions to Avoid:** This product should be kept in a cool place, preferably below 30°C. Containers should be kept dry. Keep containers and surrounding areas well ventilated. Keep away from sources of sparks or ignition. Any electrical equipment in the area of this product should be flame proofed.

**Incompatibilities:** Strong acids, strong bases, strong oxidising agents.

**Fire Decomposition:** Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Hydrogen chloride gas, other compounds of chlorine. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, unconsciousness followed by coma & death.  
**Polymerisation:** This product is unlikely to undergo polymerisation processes.

## Section 11 - TOXICOLOGICAL INFORMATION

### Toxicity Data

BUTANE	LC <sub>50</sub> (Inhalation): 658 g/m <sup>3</sup> /4 hours (rat)
ETHANOL	LC <sub>50</sub> (Inhalation): 2000 ppm/10 hours (rat) LD <sub>50</sub> (Ingestion): 3450 mg/kg (mouse)
CYPERMETHRIN	LC <sub>50</sub> (Inhalation): 7889 mg/m <sup>3</sup> /4hrs (rat) LD <sub>50</sub> (Ingestion): 24750 ug/kg (mouse) LD <sub>50</sub> (Skin): 1600 mg/kg (rat)
IMIPROTHRIN	LD <sub>50</sub> (Ingestion): 1600 mg/kg (rat) LD <sub>50</sub> (Skin): >2000 mg/kg LC <sub>50</sub> (Inhalation): >1,200 mg/m <sup>3</sup>

## Section 12 - ECOLOGICAL INFORMATION

**Environment:** Limited ecotoxicity data was available for this product at the time this report was prepared. Ensure appropriate measures are taken to prevent this product from entering the environment.

**Ecotoxicity:** High toxicity to aquatic organisms.

**Persistence /**

**Degradability:** This product is biodegradable.

**Mobility:** This product is not likely to volatilise rapidly into the air due to its low vapour pressure. It is not likely to move rapidly with surface or groundwater flows because of its low water solubility.

## Section 13 - DISPOSAL CONSIDERATIONS

**Disposal:** This product may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by some means. If neither of these options is suitable, consider controlled incineration, or landfill.

## Section 14 - TRANSPORT INFORMATION

Classified as Dangerous Goods by the criteria of the ADG Code.



UN No:	1950 2.1
DG Class:	None Allocated
Subsidiary Risk(s):	None Allocated
Pkg Group:	None Allocated
Hazchem Code:	2Y
EPG:	2D1

## Section 15 - REGULATORY INFORMATION

**AICS:** All of the significant ingredients in this formulation are to be found in the public AICS Database.

**Poison Schedule:** A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

## Section 16 - OTHER INFORMATION

AEROSOL CANS may explode at temperatures approaching 50°C.

**This MSDS contains only safety-related information. For other data see product literature.**

### Acronyms:

<b>ADG Code</b>	Australian Code for the Transport of Dangerous Goods by Road and Rail
<b>AICS</b>	Australian Inventory of Chemical Substances
<b>CAS number</b>	Chemical Abstracts Service Registry Number
<b>Hazchem Number</b>	Emergency action code of numbers and letters that provide information to emergency services especially fire-fighters
<b>IARC</b>	International Agency for Research on Cancer
<b>NOHSC</b>	National Occupational Health and Safety Commission
<b>NOS</b>	Not otherwise specified
<b>NTP</b>	National Toxicology Program (USA)
<b>R-Phrase</b>	Risk Phrase
<b>SUSDP</b>	Standard for the Uniform Scheduling of Drugs & Poisons
<b>UN Number</b>	United Nations Number

This MSDS 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 MSDS 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 Ensystem 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.