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## SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

#### 1.1 Product identifier

**Product name** AEROSOL OUTDOOR FOGGER WITH CITRONELLA  
**Synonym(s)** 01749 - MANUFACTURER'S CODE • DAVID GRAYS OUTDOOR FOGGER (FORMERLY) • OUTDOOR FOGGER CITRONELLA

#### 1.2 Uses and uses advised against

**Use(s)** FLY SPRAY • INSECTICIDE • PESTICIDE

#### 1.3 Details of the supplier of the product

**Supplier name** DAVID GRAY & CO PTY LIMITED  
**Address** 2 Rawlinson St, O'Connor, WA, 6961, AUSTRALIA  
**Telephone** (08) 9337 4933  
**Fax** (08) 9337 8316  
**Email** [general@davidgray.com.au](mailto:general@davidgray.com.au)  
**Website** <http://www.davidgray.com.au>

#### 1.4 Emergency telephone number(s)

**Emergency** (08) 9337 4933 (B/H)

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS (GHS ONLY) ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

**GHS classification(s)** Aerosols - Flammable: Category 1  
Aquatic Toxicity (Chronic): Category 1

#### 2.2 Label elements

**Signal word** DANGER

**Pictogram(s)**



**Hazard statement(s)**

H222 Extremely flammable aerosol.  
H410 Very toxic to aquatic life with long lasting effects.

**Prevention statement(s)**

P210  
P211  
P251  
P273  
**Storage statement(s)**  
P410 + P412

**Response statement(s)**

P391

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open flame or other ignition source.  
Pressurized container: Do not pierce or burn, even after use.  
Avoid release to the environment.

Collect spillage.

Protect from sunlight. Do not expose to temperatures exceeding 50°C.

**PRODUCT NAME AEROSOL OUTDOOR FOGGER WITH CITRONELLA****Disposal statement(s)**

P501 Dispose of contents/container in accordance with relevant regulations.

**2.3 Other hazards**

No information provided.

**3. COMPOSITION/ INFORMATION ON INGREDIENTS****3.1 Substances / Mixtures**

Ingredient	CAS Number	EC Number	Content
C3-C4 ALKANE BLEND	68475-59-2	270-653-6	30 to 60%
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT	64742-47-8	265-149-8	10 to 30%
PIPERONYL BUTOXIDE	51-03-6	200-076-7	1.5%
CITRONELLA OIL	8000-29-1	616-771-7	0.6%
TETRAMETHRIN	7696-12-0	231-711-6	0.4%
PERMETHRIN	52645-53-1	258-067-9	0.2%
WATER	7732-18-5	231-791-2	30 to 60%

**4. FIRST AID MEASURES****4.1 Description of first aid measures**

<b>Eye</b>	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
<b>Inhalation</b>	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
<b>Skin</b>	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
<b>Ingestion</b>	For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting. Ingestion is considered unlikely due to product form.
<b>First aid facilities</b>	None allocated.

**4.2 Most important symptoms and effects, both acute and delayed**

See Section 11 for more detailed information on health effects and symptoms.

**4.3 Immediate medical attention and special treatment needed**

Treat symptomatically.

**5. FIRE FIGHTING MEASURES****5.1 Extinguishing media**

Dry agent, carbon dioxide, foam or water fog. Prevent contamination of drains and waterways.

**5.2 Special hazards arising from the substance or mixture**

Highly flammable aerosol. May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition. Aerosol may explode at temperatures exceeding 50°C. Eliminate all ignition sources including cigarettes, open flames, spark producing switches/tools, heaters, naked lights, pilot lights, mobile phones, etc when handling. Aerosol cans may explode when heated above 50°C. May evolve nitrogen oxides when heated to decomposition.

**5.3 Advice for firefighters**

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

**5.4 Hazchem code**

2Y	
2	Fine Water Spray.
Y	Risk of violent reaction or explosion. Wear full fire kit and breathing apparatus. Contain spill and run-off.

**6. ACCIDENTAL RELEASE MEASURES**

## PRODUCT NAME AEROSOL OUTDOOR FOGGER WITH CITRONELLA

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel.

### 6.2 Environmental precautions

Prevent product from entering drains and waterways.

### 6.3 Methods of cleaning up

If aerosol can damaged or leaking, contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

### 6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

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## 7. HANDLING AND STORAGE

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### 7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool (< 50°C), dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure aerosol containers/ cans are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for damaged/ leaking containers. Large storage areas should have appropriate fire protection systems.

### 7.3 Specific end use(s)

No information provided.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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### 8.1 Control parameters

#### Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Mineral Oil Mist	SWA (AUS)	--	5	--	--

#### Biological limits

No biological limit values have been entered for this product.

### 8.2 Exposure controls

**Engineering controls** Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Flammable/explosive vapours may accumulate in poorly ventilated areas. Vapours are heavier than air and may travel some distance to an ignition source and flash back. Maintain vapour levels below the recommended exposure standard.

#### PPE

<b>Eye / Face</b>	With prolonged use, wear safety glasses and splash-proof goggles.
<b>Hands</b>	With prolonged use, wear PVC or rubber gloves.
<b>Body</b>	Not required under normal conditions of use.
<b>Respiratory</b>	Where an inhalation risk exists, wear a Type A-Class P1 (Organic gases/vapours and Particulate) respirator. Where the boiling point is < 65°C, use an AX filter type.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	WHITE LIQUID (AEROSOL DISPENSED)
<b>Odour</b>	SLIGHT ODOUR
<b>Flammability</b>	HIGHLY FLAMMABLE
<b>Flash point</b>	-104°C (Propellant)
<b>Boiling point</b>	-42°C (Propellant)
<b>Melting point</b>	NOT AVAILABLE
<b>Evaporation rate</b>	NOT AVAILABLE
<b>pH</b>	NOT AVAILABLE

**9.1 Information on basic physical and chemical properties**

Vapour density	NOT AVAILABLE
Specific gravity	NOT AVAILABLE
Solubility (water)	INSOLUBLE
Vapour pressure	315 - 345 kPa @ 25°C
Upper explosion limit	9.6 % (Propellant)
Lower explosion limit	1.5 % (Propellant)
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

**10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

Carefully review all information provided in sections 10.2 to 10.6.

**10.2 Chemical stability**

Stable under recommended conditions of storage.

**10.3 Possibility of hazardous reactions**

Polymerization is not expected to occur.

**10.4 Conditions to avoid**

Avoid heat, sparks, open flames and other ignition sources.

**10.5 Incompatible materials**

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), alkalis (e.g. sodium hydroxide), heat and ignition sources.

**10.6 Hazardous decomposition products**

May evolve carbon oxides and hydrocarbons when heated to decomposition.

**11. TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

<b>Health hazard summary</b>	May be harmful. This product has the potential to cause adverse health effects with over exposure. Use safe work practices to avoid eye or skin contact and inhalation.	
<b>Eye</b>	Irritant. Contact may result in irritation, lacrimation, pain and redness.	
<b>Inhalation</b>	Low to moderate irritant. Over exposure may result in irritation of the nose and throat, with coughing. High level exposure may result in breathing difficulties.	
<b>Skin</b>	Irritant. Contact may result in irritation, redness, rash and dermatitis. May cause sensitisation by skin contact.	
<b>Ingestion</b>	Ingestion is considered unlikely due to product form.	
	PIPERONYL BUTOXIDE (51-03-6)	
	LD50 (oral)	2600 mg/kg (mouse)
	LD50 (dermal)	200 mg/kg (rabbit)
	CITRONELLA OIL (8000-29-1)	
	LD50 (oral)	4.6 g/kg (mouse)
	LD50 (dermal)	4700 mg/kg (rabbit)
	TETRAMETHRIN (7696-12-0)	
	LD50 (oral)	1000 mg/kg (mouse)
	LD50 (dermal)	2500 ug/kg (rat)
	LC50 (inhalation)	2 g/m <sup>3</sup> (mouse)
	PERMETHRIN (52645-53-1)	
	LD50 (oral)	383 mg/kg (rat)
	LD50 (dermal)	1750 mg/kg (rat)
	LC50 (inhalation)	485 mg/m <sup>3</sup> (rat)

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Very toxic to aquatic life with long lasting effects. Toxic to bees and fish and only slightly toxic to pets and livestock.

### 12.2 Persistence and degradability

Active ingredients breakdown in the environment by hydrolysis or oxidation in sunlight.

### 12.3 Bioaccumulative potential

The active ingredients do not bioaccumulate in animal systems.

### 12.4 Mobility in soil

No information provided.

### 12.5 Other adverse effects

No information provided.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

<b>Waste disposal</b>	For small amounts, absorb contents with sand or similar and dispose of to an approved landfill site. Do not puncture or incinerate aerosol cans. Contact the manufacturer/supplier for additional information (if required).
<b>Legislation</b>	Dispose of in accordance with relevant local legislation.

## 14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE



	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
<b>14.1 UN Number</b>	1950	1950	1950
<b>14.2 Proper Shipping Name</b>	AEROSOLS	AEROSOLS	AEROSOLS
<b>14.3 Transport hazard class</b>	2.1	2.1	2.1
<b>14.4 Packing Group</b>	None allocated.	None allocated.	None allocated.

### 14.5 Environmental hazards

No information provided.

### 14.6 Special precautions for user

<b>Hazchem code</b>	2Y
<b>GTEPG</b>	2D1
<b>EMS</b>	F-D, S-U

## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

<b>Poison schedule</b>	Classified as a Schedule 6 (S6) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
<b>Classifications</b>	Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.  The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)].

**PRODUCT NAME AEROSOL OUTDOOR FOGGER WITH CITRONELLA**

<b>Hazard codes</b>	F+	Extremely flammable
	N	Dangerous for the environment
<b>Risk phrases</b>	R12	Extremely Flammable.
	R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Safety phrases</b>	S16	Keep away from sources of ignition - No smoking.
<b>Inventory listing(s)</b>	<b>AUSTRALIA: AICS (Australian Inventory of Chemical Substances)</b> All components are listed on AICS, or are exempt.	

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**16. OTHER INFORMATION**

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**Additional information** SYNERGISM - ANTAGONISM: Ingredients in this product may act together to aggravate or reduce adverse effects. Accordingly the time weighted average concentration (TWA) provided for single ingredients should be considered as a guide only and all due care exercised when handling.

AEROSOL CANS may explode at temperatures approaching 50°C.

**PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:**

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

**HEALTH EFFECTS FROM EXPOSURE:**

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

<b>Abbreviations</b>	ACGIH	American Conference of Governmental Industrial Hygienists
	CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
	CNS	Central Nervous System
	EC No.	EC No - European Community Number
	EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
	GHS	Globally Harmonized System
	GTEPG	Group Text Emergency Procedure Guide
	IARC	International Agency for Research on Cancer
	LC50	Lethal Concentration, 50% / Median Lethal Concentration
	LD50	Lethal Dose, 50% / Median Lethal Dose
	mg/m <sup>3</sup>	Milligrams per Cubic Metre
	OEL	Occupational Exposure Limit
	pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
	ppm	Parts Per Million
	STEL	Short-Term Exposure Limit
	STOT-RE	Specific target organ toxicity (repeated exposure)
	STOT-SE	Specific target organ toxicity (single exposure)
	SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
	SWA	Safe Work Australia
	TLV	Threshold Limit Value
TWA	Time Weighted Average	

**PRODUCT NAME    AEROSOL OUTDOOR FOGGER WITH CITRONELLA**

**Report status**

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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