

# SAFETY DATA SHEET

Product Name: Flypel

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Reviewed on: 16<sup>th</sup> October 2008

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND SUPPLIER

<b>Product name:</b>	<b>Flypel</b>
<b>Product code:</b>	A5936
<b>Recommended use:</b>	For the control of blowfly strike, lice and keds on sheep and lambs.
<b>Company details:</b>	Merial Ancare
<b>Address:</b>	Level 3, Merial Building Osterley Way Manukau City New Zealand
<b>Telephone number:</b>	Phone: +64 9 980 1600 Fax: +64 9 980 1601
<b>Emergency telephone number:</b>	Merial Ancare Freephone: 0800 800 822 National Poisons Centre : 0800 764 766 (0800 POISON) Fire Service, Ambulance : Dial 111
<b>Date of preparation:</b>	28 April 2006

## SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical characterization:** Liquid

**Product components:**

<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
Cypermethrin	52315-07-8	100.0
Chlorpyrifos	2921-88-2	10.0
Other		to 1L

## SECTION 3: HAZARDS IDENTIFICATION

<b>Hazard classifications:</b>	3.1D, 6.1D, 6.3B, 6.4A, 6.5B, 6.8B, 6.9A, 9.1A, 9.3C, 9.4A
<b>Priority and secondary identifiers:</b>	WARNING KEEP OUT OF REACH OF CHILDREN WARNING Dangerous to the environment WARNING Combustible liquid
<b>Risk and safety phrases:</b>	3.1D Combustible liquid. Do not use or store near heat or open flame. 6.1D May be harmful if swallowed. Wash hands and exposed skin before meals and after use. 6.3B May cause mild skin irritation. Avoid skin contact. 6.4A May cause eye irritation. Avoid contact with eyes. 6.5B Repeated exposure may cause skin allergy. Avoid skin contact. 6.8B Cypermethrin possibly may affect development and/or reproduction. Handle with care. 6.9A Cypermethrin may affect the gastrointestinal tract. Handle with care. 9.1A Very toxic to aquatic organisms. Avoid contamination of any water supply with product or empty container. 9.3C Harmful to terrestrial vertebrates. Avoid release to the environment. 9.4A Very toxic to terrestrial invertebrates. Avoid release to the environment.

## SECTION 4: FIRST AID MEASURES

<b>Necessary first aid measures:</b>	For advice contact the National Poisons Centre on 0800 POISON (0800 764 766), or a doctor immediately. <u>Ingestion:</u> If swallowed seek medical attention. Do NOT induce vomiting.
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<b>Workplace facilities:</b>	<u>Eyes:</u> If splashed in eyes wash out immediately with water.
<b>Required instructions:</b>	<u>Skin:</u> If skin or hair contact occurs remove contaminated clothing and flush skin and hair with running water.
	<u>Inhalation:</u> Remove to fresh air.
	No special facilities required.
<b>Notes for medical personnel:</b>	Observe good work practices and avoid skin and eye contact. Avoid contact with spray during application. Wash hands and exposed skin before meals and after use. Do not eat or drink while using. Launder protective clothing separately from other clothing, and before each reuse.
	Apply symptomatic therapy. Note the nature of the product. Contains an organophosphate insecticide (cholinesterase inhibitor).

## SECTION 5: FIRE FIGHTING MEASURES

<b>Type of hazard:</b>	Combustible liquid
<b>Fire hazard properties:</b>	Combustible [estimated flashpoint is 60-93°C cc]. Hazardous fumes when heated to decomposition.
<b>Regulatory requirements:</b>	Not applicable
<b>Extinguishing media and methods:</b>	Extinguish using water spray or chemical foam. Do not allow fire water to enter drains.
<b>Hazchem code:</b>	2X
<b>Recommended protective clothing:</b>	When fighting a major fire wear full protective clothing including breathing apparatus.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

<b>Emergency procedures:</b>	Wear suitable protective clothing. Restrict access to contaminated area. Contain the spill and prevent further dispersion. Retrieve intact containers from site. Place damaged containers into containment devices. Absorb spills with inert material and place in waste containers. Wash the area with water and absorb with further inert material. Collect spilled material and place in sealable containers for subsequent disposal. Avoid contamination of water courses or sewers. Dispose of waste safely.
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## SECTION 7: HANDLING AND STORAGE

<b>Precautions for safe handling:</b>	Apply with well-maintained and calibrated equipment. Handle with care.
<b>Regulatory requirements:</b>	N/A
<b>Handling practices:</b>	N/A
<b>Approved handlers:</b>	Not required
<b>Conditions for safe storage:</b>	Store in original container, tightly closed, away from foodstuffs. Keep out of reach of children.
<b>Store site requirements:</b>	This substance is subject to a requirement for an emergency management plan, secondary containment and signage whenever it is held in quantities of 100L or more. See Hazardous Substances (Emergency management) regulations 25 to 42.
<b>Packaging:</b>	Packaging Schedule 3 (UN Packing Group III) for quantities >1L (Hazardous Substances Packaging Regulations 2001).

## SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

<b>Workplace exposure standards:</b>	Chlorpyrifos (skin) TWA 0.2 mg/m <sup>3</sup> Pyrethrins 5mg/m <sup>3</sup>
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<b>Application in the workplace:</b>	Dusts 10mg/m <sup>3</sup> Prevent exposure by using engineering controls, personal protective equipment and work practices that prevent skin and eye contact. Wash concentrate off skin immediately.
<b>Exposure standards outside the workplace:</b>	EEL: Pyrethrin 0.00001mg/L water TEL: Pyrethrin 0.1mg/m <sup>2</sup> skin surface deposition
<b>Engineering controls:</b>	Ensure that ventilation maintains dust levels below WES.
<b>Personal protection:</b>	Clothing should consist of overalls with long sleeves and impervious gloves to avoid skin contact. Wear eye protection (eg. goggles or face shield).
<b>References:</b>	N/A

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Specify product data:</b>	<u>Formulation type:</u> Solution <u>Appearance:</u> Dark blue liquid <u>Specific gravity:</u> ~0.99 g/ mL <u>Boiling point:</u> ca. 190°C <u>Vapour Pressure:</u> NA <u>Solubility in Water:</u> [cypermethrin: 0.01 mg/L @ 20 C; insoluble in water]
<b>Required specifications:</b>	N/A
<b>Further specifications:</b>	N/A
<b>Specific advice:</b>	N/A

## SECTION 10: STABILITY AND REACTIVITY

<b>Stability of the substance:</b>	Stable under normal conditions of use and storage.
<b>Conditions to avoid:</b>	Avoid storage at high temperatures. Avoid contact with ignition sources.
<b>Material to avoid:</b>	Incompatible materials: Class 1 substances (explosives) Class 2 substances (flammable gases) Class 3.2 substances (flammable liquids) Class 4 substances (flammable solids) Class 5 substances (oxidising agents)
<b>Hazardous decomposition products:</b>	No hazardous products are expected, except when heated to decomposition.
<b>Hazardous polymerization:</b>	Components are not expected to form hazardous polymers.
<b>Specific data:</b>	N/A

## SECTION 11: TOXICOLOGICAL INFORMATION

<b>Data and interpretation:</b>	May be harmful if swallowed. May cause mild skin irritation. May cause eye irritation. Repeated exposure may cause skin allergy. Danger of serious damage to health by prolonged exposure if swallowed. Cypermethrin possibly may affect development and/or reproduction. Cypermethrin may affect the gastrointestinal tract.
<b>Summaries data:</b>	<u>Cypermethrin:</u> A widely used synthetic pyrethroid insecticide. Toxic by ingestion [LD <sub>50</sub> (oral, mouse) 138mg/kg]. Ingestion of high doses induce nausea, vomiting, stomach pains, diarrhoea progressing to convulsions, unconsciousness and coma. Cypermethrin is a skin and eye irritant and may cause allergic skin reactions. Fertility was significantly reduced in male rats ingesting cypermethrin at 13.15 and 18.93mg animal/day. Sperm counts were decreased. A repeated oral dose study in rats identified a NOEL for systemic effects (nervous system and gastrointestinal

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effects) of 1mg/kg/day.

Chlorpyrifos: A broad spectrum organophosphate insecticide (anticholinesterase agent) that is toxic to humans by ingestion, dermal absorption and inhalation [LD<sub>50</sub> (oral, rat) 96mg/kg; LD<sub>50</sub> (dermal, mouse) 120mg/kg]. A skin and eye irritant. Human volunteers ingesting 0.03 mg chlorpyrifos/kg body weight/day for three weeks did not show a statistically significant plasma cholinesterase depression. Nine doses of 0.1 mg/kg/day caused plasma cholinesterase depression, but no other effect. Inhibition of plasma cholinesterase activity is the most sensitive measure of toxicity for chlorpyrifos and for a number of related organophosphorus compounds. Toxic effects include the nervous system. Expect muscarinic and nicotinic signs and symptoms. Gastrointestinal symptoms occur earliest after ingestion and include anorexia, nausea, vomiting, abdominal cramps and diarrhoea.

## SECTION 12: ENVIRONMENTAL INFORMATION

### Potential environmental interactions:

Very toxic to aquatic organisms. Harmful to terrestrial vertebrates. Very toxic to terrestrial invertebrates.

### Data organisation :

Cypermethrin: A widely used synthetic pyrethroid insecticide. Cypermethrin acts on the nervous system shows a species-selective toxicity in the order fish >amphibians much >mammals >birds. Highly toxic to fish and aquatic invertebrates [LC<sub>50</sub> (96 hr) *Barbus gonionotus* 0.4ug/L; LC<sub>50</sub> (48hr) *Daphnia magna* 0.36ug/L]. Cypermethrin is highly toxic to terrestrial invertebrates including bees [LD<sub>50</sub> 0.023ug/invertebrate]. Toxic to terrestrial vertebrates based on toxicity data from laboratory species [LD<sub>50</sub> (oral, mouse) 138mg/kg]. Does not bioaccumulate or persist.

### Environmental risk and safety phrases:

Chlorpyrifos: Broad spectrum organophosphate insecticide. Chlorpyrifos is very highly toxic to fish [LC<sub>50</sub> *Menidia peninsulae* (96h) 0.4ug/L] and other aquatic life [LC<sub>50</sub> *Daphnia magna* (48h) 0.058ug/L; EC<sub>50</sub> algae (96h) 64ug/L]. Chlorpyrifos is toxic to birds and other terrestrial vertebrates [LD<sub>50</sub> (Pheasant, oral) 8.4mg/kg]. Chlorpyrifos accumulates in the tissues of living organisms and persists in the environment. Chlorpyrifos is toxic to terrestrial invertebrates including bees [LD<sub>50</sub> 0.059ug/invertebrate].

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorpyrifos 1%)

## SECTION 13: DISPOSAL CONSIDERATIONS

### Disposal information :

Preferably dispose of the product by use. Otherwise dispose of product and packaging at an approved landfill or other approved facility. Burn empty container in an appropriate incinerator, if circumstances such as wind direction permit. Otherwise crush or puncture and bury in a suitable landfill. Do NOT use container for any other purpose.

## SECTION 14: TRANSPORT INFORMATION

### Relevant information:

Dangerous Goods for transport.  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorpyrifos 1%)  
UN Number: 3082  
Dangerous Goods Class: 9

### Other requirements:

The maximum quantity per package of this substance allowed for carriage on public transport is 1L

N/A

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## SECTION 15: REGULATORY INFORMATION

<b>Regulatory status:</b>	Registered pursuant to the ACVM Act 1997, No. A5936 See <a href="http://www.nzfsa.govt.nz/acvm">www.nzfsa.govt.nz/acvm</a> for registration conditions
<b>HSNO and ACVM controls:</b>	Approved pursuant to the HSNO Act, Approval Code HSR001812 See <a href="http://www.ermanz.govt.nz">www.ermanz.govt.nz</a> for approval conditions
<b>List exposure limits:</b>	Refer to Section 3 N/A

## SECTION 16: OTHER INFORMATION

<b>Additional information:</b>	For product information visit the Merial website <a href="http://www.merial.co.nz">www.merial.co.nz</a> While the information set forth is believed to be accurate as of the date hereof, MERIAL NZ LTD. makes no warranty with respect hereto and disclaims all liability from reliance thereon.
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