

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND SUPPLIER

Product name:	Xterminate 10
Product code:	A5950
Recommended use:	Sheep dip for the control of lice, ked and blowfly
Company details:	Merial Ancare
Address:	Level 3, Merial Building Osterley Way Manukau City New Zealand
Telephone number:	Phone: +64 9 980 1600 Fax: +64 9 980 1601
Emergency telephone number:	Merial Ancare Freephone: 0800 800 822 National Poisons Centre : 0800 764 766 (0800 POISON) Fire Service, Ambulance : Dial 111
Date of preparation:	28 April 2006

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization:	Liquid	
Product components:		
<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
Chlorpyrifos	2921-88-2	100
Dimethyl benzene (mixed isomers)	1330-20-7	59
Benzenesulfonic acid	26264-06-2	60
Low aromatic hydrocarbon solvents	68334-30-5	73-74
Other		to 1L

SECTION 3: HAZARDS IDENTIFICATION

Hazard classifications:	3.1D, 6.1D, 6.3A, 6.7B, 6.8B, 6.9A, 8.3A, 9.1A, 9.2C, 9.3B, 9.4A
Priority and secondary identifiers:	DANGER Corrosive WARNING KEEP OUT OF REACH OF CHILDREN WARNING Dangerous to the environment
Risk and safety phrases:	3.1D Combustible liquid. Do not use or store near heat or open flame. 6.1D May be harmful if swallowed, absorbed through skin or inhaled. Wash hands and exposed skin before meals and after use. Do not inhale vapour. 6.3A May cause skin irritation. Avoid skin contact. 6.7B Hydrocarbon solvents possibly may cause cancer. Handle with care. 6.8B Dimethyl benzene (mixed isomers) possibly may affect development and/or reproduction. Handle with care. 6.9A Chlorpyrifos affects the nervous system. Handle with care. 8.3A May cause eye damage. Avoid contact with eyes. Wear eye and face protection. 9.1A Very toxic to aquatic organisms. Avoid contamination of any water supply with product or empty container. 9.2C Harmful to the soil environment. Avoid release to the environment. 9.3B Toxic to terrestrial vertebrates. Avoid release to the

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environment.
9.4A Very toxic to terrestrial invertebrates. Avoid release to the environment.

SECTION 4: FIRST AID MEASURES

Necessary first aid measures:	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. <u>Eyes:</u> If splashed in eyes wash out immediately with water. <u>Skin:</u> If skin or hair contact occurs remove contaminated clothing and flush skin and hair with running water.
Workplace facilities:	No special facilities required.
Required instructions:	Observe good work practices and avoid skin contact. 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.
Notes for medical personnel:	Product contains an organophosphate insecticide (cholinesterase inhibitor). Give atropine. Pralidoxime chloride (2-PAM: PROTOPAM chloride) may be effective as an adjunct to atropine.

SECTION 5: FIRE FIGHTING MEASURES

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency procedures:	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

Precautions for safe handling:	Apply with well-maintained and calibrated equipment. Handle with care.
Regulatory requirements:	N/A
Handling practices:	N/A
Approved handlers:	Not required

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Conditions for safe storage:	Store in a cool place below 25°C with top secured. Keep out of reach of children.
Store site requirements:	This substance is subject to a requirement for an emergency management plan and secondary containment, whenever it is held in quantities of 100L or more. See Hazardous Substances (Emergency management) regulations 25 to 42.
Packaging:	Packaging Schedule 3 (UN Packing Group III) for quantities >1L (Hazardous Substances Packaging Regulations 2001).

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Workplace exposure standards:	Chlorpyrifos (skin) TWA 0.2 mg/m ³ Dimethyl benzene TWA 217 mg/m ³ Dusts 10mg/m ³
Application in the workplace:	Prevent exposure by using engineering controls, personal protective equipment and work practices that prevent skin contact.
Exposure standards outside the workplace:	TELs and EELs are not set at this time.
Engineering controls:	Ensure that ventilation maintains dust levels below WES.
Personal protection:	Clothing should consist of overalls with long sleeves and impervious gloves.
References:	N/A

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specify product data:	<u>Formulation type:</u> Solution <u>Appearance:</u> Light brown oily liquid <u>Specific gravity:</u> ~ 0.95 g / mL <u>Vapour Pressure:</u> NA <u>Solubility in Water:</u> Insoluble in water
Required specifications:	N/A
Further specifications:	N/A
Specific advice:	N/A

SECTION 10: STABILITY AND REACTIVITY

Stability of the substance:	Stable under normal conditions of use and storage.
Conditions to avoid:	Avoid storage at high temperatures. Avoid contact with ignition sources.
Material to avoid:	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)
Hazardous decomposition products:	No hazardous products are expected, except when heated to decomposition.
Hazardous polymerization:	Components are not expected to form hazardous polymers.
Specific data:	N/A

SECTION 11: TOXICOLOGICAL INFORMATION

Data and interpretation:	May be harmful if swallowed, absorbed through skin or inhaled. May cause skin irritation. May cause eye damage. Danger of serious damage to health by prolonged exposure if swallowed, absorbed through skin or inhaled.
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Summaries data:

Hydrocarbon solvents possibly may cause cancer. Dimethyl benzene possibly may affect development and/or reproduction. Chlorpyrifos affects the nervous system.

Chlorpyrifos: A broad spectrum organophosphate insecticide (anticholinesterase agent) that is toxic to humans by ingestion, dermal absorption and inhalation [LD₅₀ (oral, rat) 96mg/kg; LD₅₀ (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.

Dimethyl benzene (xylene): Harmful by ingestion [LD₅₀ 1590mg/kg (mouse)], inhalation [LC₅₀ 27.6mg/L (rat, 4h vapour)] or when absorbed through skin. A skin and eye irritant. Teratogenicity studies showed a reduction in foetal weight, delayed ossification and behavioural impairment of the CNS at doses causing no/slight maternal toxicity (0.5mg/L/d). The target organ is the nervous system (neurobehavioural effects). Inhalation of xylene at a concentration of 435-1300 mg/m³ (0.43mg/L/d) for 15 min to 6 hr/day for 4 days resulted in CNS disturbances including changes in numerative ability, reaction time, short-term memory and electroencephalograph.

Benzenesulfonic acid: An acute oral toxin [LD₅₀ 1086mg/kg (oral, rat)] and irritant to skin. A serious eye irritant/ corrosive - damaging to eyes.

Low aromatic hydrocarbon solvents (Diesel solvent): Respiratory and skin irritant. The product may contain polycyclic aromatic hydrocarbons which may be carcinogenic. Generally regarded as being of low toxicity unless contact is repeated and/or prolonged [LD₅₀ Rat oral >2000 mg/kg]. Carcinogenic (NTP).

SECTION 12: ENVIRONMENTAL INFORMATION

Potential environmental interactions:

Very toxic to aquatic organisms. Harmful to the soil environment. Toxic to terrestrial vertebrates. Very toxic to terrestrial invertebrates.

Data organisation :

Chlorpyrifos: Broad spectrum organophosphate insecticide. Chlorpyrifos is very highly toxic to fish [LC₅₀ *Menidia peninsulae* 0.4ug/L (96h)] and other aquatic life [LC₅₀ *Daphnia magna* 0.058ug/L (48h); EC₅₀ algae 64ug/L (96h)]. Chlorpyrifos is toxic to birds and other terrestrial vertebrates [LD₅₀ (oral, pheasant) 8.4mg/kg]. Chlorpyrifos accumulates in the tissues of living organisms and persists in the environment. Chlorpyrifos is toxic to terrestrial invertebrates including bees [LD₅₀ 0.059ug/invertebrate].

Dimethyl benzene (xylene): Toxic to aquatic organisms [LC₅₀ Rainbow trout 3.3mg/mL (96hrs); LC₅₀ crustacea 8.5mg/L (48hrs); LC₅₀ algae 10mg/mL (72hrs)] and is a potential terrestrial vertebrate toxin based on laboratory animal toxicity data [LD₅₀ (oral, mouse) 1590mg/kg].

Benzenesulfonic acid: Toxic to aquatic life [LC₅₀ Brown trout >1mg/mL (96hrs); LC₅₀ barnacle larvae 3mg/L (48hrs)] and is a potential terrestrial vertebrate toxin based on laboratory animal toxicity data [LD₅₀ (oral, rat) 1086mg/kg].

Environmental risk and safety phrases:

Not classified as dangerous for rail, road, air or sea transport.

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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 10%)
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

SECTION 15: REGULATORY INFORMATION

Regulatory status:

Registered pursuant to the ACVM Act 1997, No. A5950
See www.nzfsa.govt.nz/acvm for registration conditions

Approved pursuant to the HSNO Act, Approval Code HSR001814
See www.ermanz.govt.nz for approval conditions

HSNO and ACVM controls:

Refer to Section 3

List exposure limits:

None set

SECTION 16: OTHER INFORMATION

Additional information:

For product information visit the Merial website www.merial.co.nz
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.