

SAFETY DATA SHEET

Vanquish®

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Section 1: Identification of the Substance and Supplier

Product name	Vanquish Liquid containing 20 - 50 g/litre alpha-cypermethrin
Recommended use	Control of lice on sheep.
Company details	Coopers, 33 Whakatiki Street, Upper Hutt Phone: 0800 800 543 Fax: 0800 808 100 Website: www.coopersonline.co.nz Hours: 8 am – 5 pm, Mon – Fri
Emergency telephone	0800 764 766 (0800 POISON) 24 hours human health 0800 243 622 (0800 CHEMCALL) 24 hours
Date of preparation	September 2011

Section 2: Hazards Identification

Hazard classifications	6.5B, 6.9B, 9.1A, 9.3C, 9.4A
Priority identifiers	WARNING Ecotoxic
Secondary identifier	6.5B May cause an allergic skin reaction 6.9B May cause damage to the nervous system from repeated exposure at high doses. 9.1A Very toxic to aquatic organisms with long lasting effects 9.3C Harmful to terrestrial vertebrates 9.4A Very toxic to terrestrial invertebrates
Risk & Safety Phrases	R22 Harmful if swallowed R43 May cause sensitisation by skin contact R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Section 3: Composition/Information on Ingredients

Chemical name	CAS number	Concentration
Alpha-Cypermethrin	67375-30-8	5.18%
Formaldehyde	50-00-0	<1%
Propylene Glycol	57-55-6	<10%
1,2-Benzisothiazoline-3-one (20%w/w) in Aqueous Dipropylene Glycol solution	58249-25-5	<1%

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Section 4: First Aid Measures

Necessary first aid measures

SKIN CONTACT While wearing protective gloves, carefully remove any contaminated clothing, including shoes, and wash skin thoroughly with soap and water. If irritation or symptoms occur or persist, consult a doctor. May cause skin paresthesia (stinging or burning sensation) following dermal exposure. In some cases, the effects progresses to tingling and numbness of the skin. Other effects reported in workers who handle or apply large quantities of pyrethroids include skin irritation, feeling hot or cold, red eyes, coughing and sneezing. If irritation or symptoms occur or persist, consult a doctor.

EYE CONTACT Immediately rinse eyes thoroughly with plenty of water. If wearing contact lenses, remove only after initial rinse, and continue rinsing eyes for at least 15 minutes. If irritation occurs or persists, consult a doctor.

INGESTION Rinse mouth and drink a glass of water. Do not induce vomiting unless under the direction of a qualified medical professional or National Poisons Centre. If symptoms persist, consult a doctor.

INHALATION Remove to fresh air. If any trouble breathing, get immediate medical attention. Administer artificial respiration if breathing has ceased. If irritation or symptoms occur or persist, consult a doctor.

Required instructions

For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor.

Notes for medical personnel

Inhalation: remove to fresh air & provide oxygen if breathing is difficult.
Skin contact: Symptoms: Tingling and pruritus with blotchy erythema on the face or other exposed areas, exacerbated by sweating or touching. Symptoms usually resolve within 24 hours without specific treatment.
Treatment: Topical vitamin E (tocopherol acetate) has been shown to reduce skin irritation if applied soon after exposure.

Workplace facilities

Emergency showers and eyewashes may be warranted depending on quantity and type of use.

Section 5: Fire Fighting Measures

Type of hazard

Not classified as flammable

Fire hazard properties

Not applicable

Regulatory requirements

Not applicable

Extinguishing media and methods

Water, carbon dioxide (CO₂), foam, or dry chemical.

Hazchem code

3Z (Contain spillage)

Recommended protective clothing

Wear full protective clothing and self-contained breathing apparatus (SCBA).

Section 6: Accidental Release Measures

Emergency procedures

Wear chemical resistant gloves and overalls, facemask or goggles. Prevent further spillage. Adsorb spilled product and place in sealable container for disposal. Wash down affected area with water plus detergent. Absorb and collect washings and place in the same sealable container for disposal. Seek advice from the local authority regarding disposal. Avoid contamination of any water source or soil with product or empty container.

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Section 7: Handling and Storage

Precautions for safe handling	Avoid contact with skin, eyes, and mucosa. Keep containers adequately sealed during material transfer, transport, or when not in use. See Section 8 (Exposure Controls) for additional guidance.
Regulatory requirements	Signage required where quantities greater than 100L are present. Emergency Plan required where quantities greater than 100L are present
Handling practices	Avoid contact with skin. Keep containers adequately sealed during material transfer, transport, or when not in use.
Approved handlers	Not required
Conditions for safe storage	Store in original container in a cool, dry, ventilated place away from direct heat or direct sunlight. Keep container sealed when not in use. Keep out of reach of children.
Store site requirements	Store at room temperature (i.e. 5 to 25 °C)
Packaging	PG III

Section 8: Exposure Control/Personal Protection

Workplace exposure standards	Formaldehyde Ceiling 1ppm (1.2 mg/m ³) Propylene Glycol TWA 150ppm 474mg/m ³ (vapour and particulates)
Application in the workplace	Ensure adequate ventilation. Keep container sealed when not in use.
Exposure standards outside the workplace	No TEL or EEL is set for this substance at this time
Personal protection	Wear chemical resistant gloves, facemask or goggles.
Engineering controls	The health hazard risks of handling this material are dependent on many factors, including physical form, duration and frequency of process or task, and effectiveness of engineering controls. Site-specific risk assessments should be conducted to determine the feasibility and the appropriateness of all exposure control measures. Exposure controls for normal operating or routine procedures follow a tiered strategy. Engineering controls are the preferred means of long-term or permanent exposure control. If engineering controls are not feasible, appropriate use of personal protective equipment (PPE) may be considered as alternative control measures. Exposure controls for non-routine operations must be evaluated and addressed as part of the site-specific risk assessment.

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Section 9: Physical and Chemical Properties

Appearance	Red to pink suspension
Boiling Point	100°C
Melting/Softening point	0°C
Vapour Pressure	Not determined
Specific Gravity	1.0
Solubility (H ₂ O)	Soluble
Percent Volatiles	Not determined
Evaporation Rate	Not determined

Section 10: Stability and Reactivity

Stability of the substance	Stable under normal conditions.
Conditions to avoid	Avoid high temperatures
Material to avoid	Not applicable
Hazardous decomposition products	Carbon oxides (CO _x).

Section 11: Toxicological Information

Acute effects for individual ingredients only

ORAL	Alpha-Cypermethrin: LD50 35mg/kg bw (mouse) 5% in corn oil [EHC 1992] Formaldehyde: LD50 260 mg/kg body weight (Guinea Pig) [WHO EHC1989]
DERMAL	Formaldehyde: LD50 270 mg/kg (rabbit) [NTP]
INHALATION	Formaldehyde: LC50 (4 hr): 412 ppm (mouse) [IUCLID 2000]
TEL	No TEL is set for this substance at this time.

Chronic/long term effects for individual ingredients only

Alpha-Cypermethrin: In a study by Rose, the NOAEL was found to be 10mg/kg/bw/day. At higher doses, neurotoxic effects were noted in rats [EHC 1992]

Formaldehyde: In a study, [Orlandini A et al; Contact Dermatitis 19 (5): 383-4 (1988)] [HSDB]. NOAEL was found to be 15mg/kg/bw/day. At higher doses, neurotoxic effects were noted in male rats [IRIS]
In a study, the NOAEL was 1 ppm for rats with intact nasal epithelium. Source: BASF AG Ludwigshafen
Formaldehyde is a potent allergen and may cause contact dermatitis (irritant and allergic) from repeated exposure. Formaldehyde may also cause occupational allergic asthma. Other effects of chronic exposure include irritation as seen in acute exposure, sneezing, coughing, headache, or laryngitis. Long-term, repeated exposure to formaldehyde has also been associated with an increased risk of cancers of the bone marrow, lungs, mouth, nasal passages and sinuses.

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Section 12: Environmental Information

Effects for individual ingredients only

AQUATIC	Alpha-Cypermethrin: 24-hr LC50 0.0004mg/L (Silver barb) [ECOTOX] Alpha-Cypermethrin: 48-hr EC50 0.003mg/L (Daphnia magna) [EHC 1993] Formaldehyde: 96-hr LC50 (rainbow trout): 40-98 mg/L
TERRESTRIAL INVERTEBRATES	Alpha-Cypermethrin: 24-hr LD50 0.03µg/bee [Hillaby and Inglesfield 1986]
EEL	No EEL is set for this substance at this time

Section 13: Disposal Considerations

Disposal information

Disposal

Dispose of unused product through Agrecovery Chemicals. Avoid contamination of any water source or the environment with product or empty container.

Container Disposal

Triple rinse empty container, puncture and recycle through Agrecovery. Do NOT burn.

Reference

Current version of NZS 8409 Management of Agrichemicals

Section 14: Transport Information

Relevant information

UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Alpha-cypermethrin) Marine Pollutant
Class 9 PG III
Limited quantities: 5L
Maximum quantity for own agricultural use: 1000L

Other requirements

Refer to Haznote.

Section 15: Regulatory Information

Regulatory status

HSNO Approval Code: HSR001765.
For a full listing of controls see www.epa.govt.nz
ACVM registration number: A5997.
For conditions of registration see www.foodsafety.govt.nz

HSNO and ACVM controls

Signage: 100 Litres
Emergency Plan: 100 Litres

Section 16: Other Information

Additional information

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