


# SAFETY DATA SHEET

## Vanquish

### Section 1: Identification of the Substance and Supplier

<b>Product name</b>	Vanquish
<b>Recommended use</b>	Control of lice and prevention of flystrike in sheep.
<b>Company details</b>	<b>Schering-Plough Animal Health Ltd</b> 33 Whakatiki Street, Upper Hutt 5018, New Zealand  Phone: 0800 800 543 – Fax: 0800 808 100 Website: <a href="http://www.coopersonline.co.nz">www.coopersonline.co.nz</a> Hours: 8 am – 5 pm, Mon – Fri
<b>Emergency telephone</b>	0800 764 766 (0800 POISON) 24 hours human health 0800 243 622 (0800 CHEMCALL) 24 hours
<b>Date of preparation</b>	April 2019

### Section 2: Hazards Identification

<b>Hazard classifications</b>	6.5B: Contact sensitiser 6.9B: Target organ systemic toxicant 9.1A: Aquatic ecotoxicant 9.3C: Vertebrate ecotoxicant 9.4A: Invertebrate ecotoxicant
<b>GHS Pictogram:</b>	
<b>Signal word</b>	Warning
<b>Hazard statement</b>	H317: May cause an allergic skin reaction. H373: May cause damage to nervous system, through prolonged or repeated oral or inhalation exposure. H410: Very toxic to aquatic life with long lasting effects. H433: Harmful to terrestrial vertebrates. H441: Very toxic to terrestrial invertebrates.
<b>Prevention statement</b>	P102: Keep out of the reach of children. P103: Read label before use. P260: Do not breathe mist. P272: Contaminated work clothing should not be allowed out of the workplace. P273: Avoid release to the environment. P280: Wear protective gloves.
<b>Response statement</b>	P321: See first aid instruction on the label of the product. P314: Get medical advice/attention if you feel unwell. P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P333 + P313: If skin irritation or rash occurs: Get medical advice/attention. P362 + P364: Take off contaminated clothing and wash before reuse. P391: Collect spillage.
<b>Disposal</b>	P501: Dispose of product, packaging and waste at an approved landfill or other approved facility.

## Vanquish

**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%

**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 progress 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.

## Vanquish

### Section 5: Fire Fighting Measures

<b>Type of hazard</b>	Not classified as flammable
<b>Fire hazard properties</b>	Not applicable
<b>Regulatory requirements</b>	Not applicable
<b>Extinguishing media and methods</b>	Water, carbon dioxide (CO <sub>2</sub> ), foam, or dry chemical.
<b>Hazchem code</b>	3Z (Contain spillage)
<b>Recommended protective clothing</b>	Wear full protective clothing and self-contained breathing apparatus (SCBA).

### Section 6: Accidental Release Measures

<b>Personal Precautions</b>	Avoid contact with skin, eyes and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
<b>Environmental Precautions</b>	Prevent spilled material from flowing onto adjacent land or into streams, ponds, or lakes. Avoid release to the environment.
<b>Emergency procedures</b>	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.

### Section 7: Handling and Storage

<b>Precautions for safe handling</b>	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.
<b>Regulatory requirements</b>	Signage required where quantities greater than 100L are present. Emergency Plan required where quantities greater than 100L are present
<b>Handling practices</b>	Avoid contact with skin. Keep containers adequately sealed during material transfer, transport, or when not in use.
<b>Certified handlers</b>	Not required
<b>Conditions for safe storage</b>	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.
<b>Store site requirements</b>	Store at room temperature (i.e. 5°C to 25°C)
<b>Packaging</b>	PG III

# Vanquish

## Section 8: Exposure Control/Personal Protection

<b>Occupational exposure limits</b>	Formaldehyde Ceiling 1ppm (1.2 mg/m <sup>3</sup> ) Propylene Glycol TWA 150ppm 474mg/m <sup>3</sup> (vapour and particulates)
<b>Application in the workplace</b>	Ensure adequate ventilation. Keep container sealed when not in use.
<b>Exposure standards outside the workplace</b>	No TEL or EEL is set for this substance at this time
<b>Personal protection</b>	Wear chemical resistant gloves, facemask or goggles.
<b>Engineering controls</b>	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.

## 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 <sub>2</sub> O)	Soluble
Percent Volatiles	Not determined
Evaporation Rate	Not determined

## Section 10: Stability and Reactivity

<b>Stability of the substance</b>	Stable under normal conditions.
<b>Conditions to avoid</b>	Avoid high temperatures
<b>Material to avoid</b>	Not applicable
<b>Hazardous decomposition products</b>	Carbon oxides (CO <sub>x</sub> ).

## Vanquish

### Section 11: Toxicological Information

#### Acute effects for individual ingredients only

ORAL	Alpha-Cypermethrin: LD50 35 mg/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 10 mg/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.

### Section 12: Environmental Information

#### Effects for individual ingredients only

AQUATIC	Alpha-Cypermethrin: 24-hr LC50 0.000 4mg/L (Silver barb) [ECOTOX] Alpha-Cypermethrin: 48-hr EC50 0.003 mg/L (Daphnia magna) [EHC 1993] Formaldehyde: 96-hr LC50 (rainbow trout): 40-98 mg/L
TERRESTRIAL INVERTEBRATES	Alpha-Cypermethrin: 24-hr LD50 0.03 µg/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 contents in a suitable landfill. Where possible, dispose of unused product through AgRecovery Chemicals. Avoid contamination of any water source or the environment with product or empty container.

#### Container Disposal


Dispose of empty container by puncturing and burying in a suitable landfill. Where possible, recycle through AgRecovery. Do NOT burn.

#### Reference

Current version of NZS 8409 Management of Agrichemicals

## Vanquish

### Section 14: Transport Information

<b>UN Number</b>	UN3082
<b>UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alpha-cypermethrin)
<b>UN dangerous goods class and subsidiary risk</b>	9
<b>UN Packaging Group</b>	PG III
<b>Environmental hazards</b>	Marine Pollutant
<b>Special precautions when transporting the substance</b>	

### Section 15: Regulatory Information

<b>Regulatory status</b>	HSNO Approval Code: HSR001765. For a full listing of controls see <a href="http://www.epa.govt.nz">www.epa.govt.nz</a>  ACVM registration number: A5997. For conditions of registration see <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a>
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### Section 16: Other Information

<b>Additional information</b>	Vanquish is a registered trademark.
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