

# Material Safety Data Sheet

## 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY:

PRODUCT NAME: **CYHELLA**  
MANUFACTURER: Zelam Ltd  
SUPPLIER NAME: Zelam Ltd  
SUPPLIER ADDRESS: 13-15 Hudson Rd, Bell Block, New Plymouth, New Zealand  
SUPPLIER PHONE: +64 6 7559234 SUPPLIER FAX: +64 6 7551174  
EMERGENCY PHONE: 0800 243 622, 0800 CHEMCALL INTERNATIONAL EMERGENCY PHONE: +64 4 917 9888  
CHEMICAL FAMILY: Synthetic pyrethroid USE: Insecticide

## 2. HAZARDS IDENTIFICATION:

6.1C; Toxic - may be fatal if swallowed, inhaled or absorbed through the skin.  
6.3B; Harmful - may cause skin irritation. Avoid contact with skin.  
6.4A; Harmful - may cause eye irritation. Avoid contact with eyes.  
6.9A; Toxic - may cause organ damage from repeated oral exposure at high doses.  
9.1A; Very toxic to fish with long-lasting effects. Avoid contamination of any water supply with product or empty container.  
9.3B; Toxic to terrestrial vertebrates.  
9.4A; Very Toxic to terrestrial invertebrates.  
Refer to Section 15 for NZ EPA Requirements.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS:

COMMON NAME:	CAS NUMBER:	CONCENTRATION %:	HAZARD CLASSIFICATIONS:
Lamda-Cyhalothrin	9145-08-6	>20%	
Inerts		Balance	

## 4. FIRST - AID MEASURES:

EYE CONTACT: Immediately flush with flowing water for at least 15 minutes. Seek medical attention if irritation persists.  
SKIN CONTACT: If on skin or clothing, remove any contaminated clothing at once, and wash contaminated skin thoroughly with Corn Oil. Soap and water is generally ineffective. Facial skin contact may cause temporary facial numbness. See a doctor if irritation persists.  
INHALATION: If inhaled, move the victim to fresh air immediately. Begin artificial respiration if breathing has stopped. Use mouth to nose rather than mouth to mouth. Obtain medical attention.  
INGESTION: If swallowed, rinse mouth with water immediately. DO NOT induce vomiting. Seek medical attention.  
NOTES TO DOCTOR: No specific antidote. Treat symptomatically. Skin contact paresthesia effects (itching, tingling, burning or numbness) are transient, lasting up to 24 hours. Vitamin E cream is beneficial to relieving paresthesia effects.

## 5. FIRE FIGHTING MEASURES:

FLASHPOINT:	> 103 °C	HAZCHEM CODE:	2X
FLAMMABLE LIMITS:	Not available		
EXTINGUISHING MEDIA:	Foam, Carbon dioxide, Dry chemical or Water spray (fog).		
THERMAL DECOMPOSITION PRODUCTS:	Carbon Monoxide, Carbon Dioxide, Hydrogen Chloride, Chlorine, Fluorine and Hydrogeen Fluoride		
SPECIAL FIRE FIGHTING METHODS	Vapours may be toxic. Self contained breathing apparatus required. Do not allow contaminated run-off to enter drains.		
UNUSUAL FIRE OR EXPLOSION HAZARDS:	None		

## 6. ACCIDENTAL RELEASE MEASURES:

Use appropriate protective equipment. Clear area of unnecessary personnel. Spills may be slippery and should be cleaned up immediately. Large spill: Dike and pump as much as possible to a salvage container. Absorb the remaining liquid and any small spills with clay granules, sand or other absorbent material and sweep to a waste container. Cover the spill area with water and absorb. Dispose of waste in a manner acceptable to good waste management practice and in compliance with all regulations. Warning this substance is very toxic to aquatic organisms, minimise runoff into waterways or drains. Avoid contamination of any water supply with this substance or empty container.

## 7. HANDLING AND STORAGE:

Toxic - Keep out of reach of children.  
Store in original container, tightly closed under lock and key, in a cool, well ventilated place, away from direct sunlight and extreme heat. Keep away from food, food related materials, animal feedstuffs, seed or fertilizer.  
Chemical resistant gloves and eye protection should be worn when handling this product. Avoid skin contact.  
Wear other protective clothing when handling or using. Wash protective clothing daily after work.

Skin contact paresthesia effects (itching, tingling, burning or numbness) may occur, avoid touching bare skin with contaminated hands etc. These effects are transient, lasting up to 24 hours. Vitamin E cream is beneficial to minimising, when applied before exposure, or relieving paresthesia effects in the event of exposure.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

EXPOSURE LIMITS: No exposure limits (WES, TEL, or EELs) have been specifically assigned for this product.  
EYE PROTECTION: Avoid contact with eyes. Wear chemical goggles or face shield where splash may occur.  
RESPIRATORY PROTECTION: Avoid breathing in vapours, aerosol or mists from this product. Use an appropriate respirator mask and filter that meets AS/NZS 1716:2003 eg. Filter A2-P3 or a filter canister for organic vapours if exposure is likely.  
PROTECTIVE CLOTHING: When handling or using this product wear chemical resistant gloves, and full cover body protection including boots and washable hat. Avoid skin contact. Wash protective clothing daily after work.  
VENTILATION: General (mechanical) room ventilation is considered satisfactory. Use in a well ventilated area.  
HYGIENE PRECAUTIONS: Do not eat drink or smoke while working with this product. Remove clothing that becomes soaked or contaminated and wash before reuse. Wash hands before breaks and after work. The use of a skin barrier cream [eg Vitamin E] is useful to give additional skin protection.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE / STATE / ODOUR:	Tan coloured suspension		
BOILING POINT:	100 °C	pH:	6 - 8
DENSITY:	1.05	SETTING POINT:	Not available
DECOMPOSITION TEMP:	Not available	AUTOIGNITION TEMP:	Not available
FLASHPOINT:	>103°C closed cup	VAPOUR DENSITY:	Not available
EXPLOSION PROPERTIES:	Not applicable	VAPOUR PRESSURE:	Not available
SOLUBILITY:	0.005mg/L (lambda-cyhalothrin)		
OTHER DATA:	None		
OCTANOL / WATER PARTITION COEFFICIENT:	Kow LogP >7 (lambda-cyhalothrin)		

## 10. STABILITY AND REACTIVITY:

CONDITIONS TO AVOID:	Stable under normal storage conditons. Keep in a cool place away from heat and away from open flames.
MATERIALS TO AVOID:	Incompatible with strong acids and bases and strong oxidising agents.
HAZARDOUS DECOMPOSITION	Oxides of carbon and hydrogen fluoride and other compounds of fluorine.

## 11. TOXICOLOGICAL INFORMATION:

ACUTE ORAL:	LD50 Rat: >200 mg/Kg [By calculation]
ACUTE DERMAL:	LD50 Rat: 1930 mg/Kg [By calculation]
ACUTE INHALATION:	LC50 Rat: 11 mg/L (4 hour) [By calculation]
OTHER TOXICITY INFORMATION:	

May be fatal if swallowed, inhaled or absorbed through the skin.  
May cause skin and eye irritation. Avoid contact with skin or eyes.  
May cause organ damage from repeated oral exposure at high doses.

Reversible paresthesia (abnormal skin sensation. Reversible clinical signs of neurotoxicity in mammals.  
In rats, following oral administration, Lambda-cyhalothrin is rapidly eliminated in urine & faeces.

## 12. ECOLOGICAL INFORMATION:

Aquatic Toxicity: LC 50 (96 hr) for rainbow trout, 0.079 mg/L [By calculation].  
Terrestrial Vertebrates - Birds: LD50 bobwhite quail, >5300 mg/kg. [By calculation].  
Terrestrial Invertebrates - Bees: Very toxic to bees.

Very toxic to fish. Avoid contamination of any water supply with this product or empty container.  
Toxic to terrestrial vertebrates [birds]  
Very Toxic to terrestrial invertebrates [bees]. Spray must not be applied in an area where bees are actively foraging.

In soil, DT50 c. 6 - 40 days. Leaching of Lambda-cyhalothrin and its degradation products is negligible.

## 13. DISPOSAL CONSIDERATIONS:

Triple rinse empty container and add rinsate to the spray tank. If recycling, discard cap and deliver clean container to an Agrecovery depot. Alternatively crush and bury in a suitable landfill.  
Dispose of product only by using according to this label, or at an approved disposal facility.  
Avoid contamination of any water supply or stream with product or empty container.

## 14. TRANSPORT INFORMATION:

Proper Shipping Name: PYRETHROID PESTICIDE, LIQUID, TOXIC, N.O.S. (Lambda-cyhalothrin)  
UN Number: 3352 UN Hazard Class: 6.1  
Packing Group: III Hazchem Code: 2X  
Additional Information: Do not carry more than 1 litre of this product on a passenger service vehicle.

## 15. REGULATORY INFORMATION:

APPROVED HANDLER: This product must be under the personal control of an approved handler or it must be locked up. However a non approved handler may handle the product if: an approved handler is present at the facility where the substance is being handled, and the approved handler has provided guidance to the person in respect to the handling of the product, and is available at all times to provide assistance if necessary.

This product shall NOT be applied onto or into water.

RECORD KEEPING: A written record of each application or discharge must be kept where -  
a) members of the public may lawfully be present; or  
b) the substance is likely to enter the air or water supply and leave the area where it is under control.  
The information must be kept for a minimum of three [3] years.

TRACKED SUBSTANCE: This is a tracked substance, the location and movement of this substance must be recorded at each stage of the products life cycle by the approved handler. These records must be kept for at least three years. The person in charge must ensure all approved handler and appropriate hazard classifications are met on transfer of this product.

Approved pursuant to the HSNO Act 1996. NZ EPA Approval Code: HSR000336 See <www.epa.govt.nz> for controls.  
Registered pursuant to the ACVM Act 1997. ACVM Pesticide No: P007641 See <www.nzfsa.govt.nz> for registration conditions.

## 16. OTHER INFORMATION:

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the product's properties.