

# SAFETY DATA SHEET

# CYHELLA



SDS Date: 21 September 2017

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING:

### Product identifier

Product Name **Cyhella**

Product Code 1001594, 1001903

### Other means of identification

Proper shipping name PYRETHROID PESTICIDE, LIQUID, TOXIC, N.O.S  
(Lambda-cyhalothrin)

UN Number 3352

### Recommended use of the chemical and restrictions on use

Recommended Use Insecticide

### Details of manufacturer or importer

#### Manufacturer

Zelam Ltd,  
a Lonza Company  
13 – 15 Hudson Road,  
Bell Block,  
New Plymouth, 4312  
New Zealand  
Phone; +64 6 755 9234  
Fax; +64 6 755 1174

#### Supplier

FMC Australasia Pty Ltd  
ABN: 45 095 326 891  
12 Julius Avenue  
North Ryde,  
NSW 2113,  
Australia  
Freecall: 1800 624 597  
Web site: [www.fmccrop.com.au](http://www.fmccrop.com.au)

### Emergency telephone number

Emergency phone (24 hours Australia wide) 1800 033 111  
Poisons Information Centre 13 1126

## 2. HAZARDS IDENTIFICATION:

Classified as a **HAZARDOUS CHEMICAL** according to Workplace Health and Safety (WHS) Australia.  
Classified as **DANGEROUS GOODS** by the criteria of the ADG Code for Transport by Road and Rail.

### GHS Classification

Acute toxicity	Category 3	(H301, H311, H331)
Skin corrosion/irritation	Category 3	(H316)
Serious eye damage/eye irritation	Category 2	(H319)
Specific target organ systemic toxicity (repeated exposure)	Category 1	(H370)
Aquatic toxicity – Acute	Category 1	(H400)
Aquatic toxicity – Chronic	Category 1	(H410)

### Label elements



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**Signal Word** Danger

## Hazard Statements

- H301, H311, H331 – Toxic if swallowed, in contact with skin or if inhaled
- H316 – Causes mild skin irritation.
- H319 – Causes serious eye irritation.
- H372 Causes damage to organs through prolonged or repeated exposure
- H400 Very toxic to aquatic life
- H410 Very toxic to aquatic life with long lasting effects

## Precautionary Statements - Prevention

- Keep out of reach of children.
- Read label before use.
- Do not breathe mist or spray
- Wear protective gloves, protective clothing, eye and face protection
- Contaminated clothing should not be allowed out of the workplace
- Wash face and hands thoroughly after handling
- Do not eat, drink or smoke while using this product.
- Avoid release to the environment

## Precautionary Statements - Response

- Specific treatment (see First Aid on this SDS).
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

## Precautionary Statements - Storage

- Store locked up in original container, tightly closed away from food, food related materials, animal feedstuffs, seed or fertilizer.

## Precautionary Statements - Disposal

- Dispose of contents/container to an approved waste disposal facility.

## Other hazards

### **3. COMPOSITION/INFORMATION ON INGREDIENTS:**

#### **Substance**

**Chemical nature** Mixture

Chemical Name	CAS Number	Weight %
Lambda-cyhalothrin	9145-08-6	20 - 30

Other ingredients Proprietary Balance

### **4. FIRST AID MEASURES:**

#### **Description of first aid measures**

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<b>General advice</b>	The following are required: Running Water Emergency shower, hand wash, soap
<b>Emergency telephone number</b>	Poisons Information Centre, Australia: 13 11 26
<b>Ingestion</b>	If swallowed, rinse mouth with water immediately. DO NOT induce vomiting. Seek medical attention.
<b>Eye Contact</b>	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.
<b>Skin Contact</b>	If on skin or clothing, remove any contaminated clothing at once, and wash contaminated skin thoroughly with water or preferably Corn Oil. Soap and water are generally ineffective. Facial skin contact may cause temporary facial numbness. See a doctor if irritation persists. Wash clothing before reuse.
<b>Inhalation</b>	Avoid inhalation of spray or mists which are likely to be irritating. Remove to a source of fresh air and seek medical advice.
<b>Self-protection of the first aider</b>	First aider: Pay attention to self-protection. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protection recommended in Section 8.
<b>Notes to physicians</b>	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.

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## **5. FIREFIGHTING MEASURES:**

### **Suitable Extinguishing Media**

#### **Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Small Fire** Dry chemical or CO<sub>2</sub>.

**Large Fire** Water spray or fog.

#### **Unsuitable extinguishing media**

Do not use a solid water stream as it may scatter and spread fire

### **Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating and toxic gases and vapours

Do not allow run-off from fire-fighting to enter drains or water courses

**Hazardous combustion products:** Oxides of sulphur. Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>).

### **Special protective actions for fire-fighters**

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

**Hazchem code** 2X

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Legend IERG Code: 35

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## **6. ACCIDENTAL RELEASE MEASURES:**

### **Personal precautions, protective equipment and emergency procedures**

#### **Personal precautions**

Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas.

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protection recommended in Section 8.

#### **For emergency responders**

Use personal protection recommended in Section 8.

### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Avoid release to the environment. Do not allow into any sewer, on the ground or into any body of water. Local authorities should be advised if significant spillages cannot be contained. Dispose of contents/container to an approved waste disposal plant.

### **Methods and material for containment and cleaning up**

#### **Methods for containment**

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

#### **Methods for cleaning up**

Pick up and transfer to properly labelled containers. Use a non-combustible material like vermiculite or sand to soak up the product and place into a container for later disposal.

### **Precautions to prevent secondary hazards**

#### **Prevention of secondary hazards**

Clean contaminated objects and areas thoroughly observing environmental regulations.

#### **Reference to other sections**

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## **7. HANDLING AND STORAGE;**

### **Precautions for safe handling**

#### **Advice on safe handling**

Harmful - Keep out of reach of children.

Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. When using do not eat, drink or smoke. Ensure adequate ventilation, especially in confined areas. Wash thoroughly after handling.

Wash contaminated clothing before reuse.

#### **General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice. Keep working clothes separately. Regular cleaning of equipment, work area and clothing is recommended.

### **Conditions for safe storage, including any incompatibilities**

#### **Storage Conditions**

Store in original container in a cool, well ventilated place, away from direct sunlight and extreme heat. Keep container tightly closed and away from food or food related materials.

#### **Incompatible materials**

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Incompatible with strong oxidising agents such as dry chlorine powders.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION:**

### **Control parameters**

#### **Exposure Limits**

No exposure limits (TWA, STEL or TLV) have been specifically assigned for this product.

### **Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

### **Individual protection measures, such as personal protective equipment**

**Eye/face protection** Avoid contact with eyes. Wear a face shield or full chemical workers goggles when there is a risk of a splash.

#### **Hand Protection**

Wear Chemical resistant gloves, the selected protective gloves have to satisfy the specifications of AS 2161. Gloves must be inspected prior to use. Replace when worn.

#### **Skin and body protection**

Wear suitable protective clothing. Clothing material compliant with AS 4501, and footwear compliant with AS/NZS 2210 are recommended.

#### **Respiratory protection**

Ensure adequate ventilation, especially in confined areas.

In case of inadequate ventilation wear respiratory protection.

AS/NZS 1716:2012 : Respiratory protective devices

AS/NZS 1715:2009 : Selection, use and maintenance of respiratory protective equipment

#### **Environmental exposure controls**

Do not allow into any sewer, on the ground or into any body of water.

#### **Hygiene/Other 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 is useful to give additional skin protection.

## **9. PHYSICAL AND CHEMICAL PROPERTIES:**

### **Information on basic physical and chemical properties**

**Physical state** Liquid suspension

**Colour** Tan

**Odour** Faint odour

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	5 - 8	solution (5 %) CIPAC MT 75.3
<b>Melting point / freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	100 °C	

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<b>Flash point</b>	>103 °C	CC (closed cup)
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>	No information available	
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	No information available	
<b>Relative density</b>	1.03 – 1.06	@ 20 °C
<b>Water solubility</b>	Miscible in water	
<b>Solubility(ies)</b>	No information available	
<b>Partition coefficient</b>	log Pow >7 (Lambda-cyhalothrin)	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	
<b>Other Information</b>		
<b>VOC Content (%)</b>	No information available	
<b>Bulk density</b>	No information available	

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## **10. STABILITY AND REACTIVITY:**

### **Reactivity**

No data available

### **Chemical stability**

Stable under normal conditions.

### **Possibility of Hazardous Reactions**

#### **Possibility of Hazardous Reactions**

None under normal processing.

### **Conditions to avoid**

Extremes of temperature [>40°C]

### **Incompatible materials**

Incompatible with strong acids and bases and strong oxidising agents.

### **Hazardous Decomposition Products**

Oxides of carbon and hydrogen fluoride and other compounds of fluorine

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## **11. TOXICOLOGICAL INFORMATION:**

### **Acute toxicity**

#### **Acute toxicity**

Toxic if swallowed, in contact with skin or if inhaled

### **Information on likely routes of exposure**

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<b>Product Information</b>	Product presents an acute toxicity hazard based on known or supplied information.
<b>Inhalation</b>	Toxic if inhaled. Avoid breathing mists.
<b>Eye contact</b>	May cause eye irritation. Avoid contact with eyes.
<b>Skin contact</b>	May cause skin irritation. Avoid contact with skin.
<b>Ingestion</b>	Toxic if swallowed. Do not taste or swallow.

## Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document, EU Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

<b>ATEmix (oral) LD50 Rat</b>	>200 mg/kg
<b>ATEmix (dermal) LD50 Rat</b>	1930 mg/kg
<b>ATEmix (inhalation) LC50 Rat</b>	11 mg/L (4h)

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

### **Skin corrosion/irritation**

May cause skin irritation.

### **Serious eye damage/eye irritation**

May cause eye irritation.

### **Sensitization**

No information available.

### **Germ cell mutagenicity**

No information available.

### **Carcinogenicity**

No information available.

### **Reproductive toxicity**

No information available.

### **Specific Target Organ Toxicity [STOT] - single exposure**

No information available.

### **Specific Target Organ Toxicity [STOT] - repeated exposure**

May cause organ damage from repeated oral exposure at high doses

### **Aspiration hazard**

No information available.

### **Other information**

Reversible paresthesia (abnormal skin sensation). Reversible clinical signs of neurotoxicity in mammals.

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## **12. ECOLOGICAL INFORMATION:**

### **Ecotoxicity**

Very toxic to fish. LC50 (96 hr) for *Oncorhynchus mykiss* [rainbow trout]: 0.079 mg/L [by calculation].

### **Persistence and degradability**

No information available.

### **Bioaccumulative potential**

No information available.

### **Mobility in soil**

No information available.

### **Other adverse effects**

Very toxic to bees. Do not spray in an area where bees are actively foraging.

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## **13. DISPOSAL CONSIDERATIONS:**

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## Waste treatment methods

### **Waste from residues/unused products**

Dispose of product only by using according to this label, or at an approved disposal facility in accordance with applicable regional, national and local laws and regulations.

### **Contaminated packaging**

Empty containers must be triple rinsed before they are disposed of in any forms as mentioned below. Add rinsate to the spray tank.

If recycling, replace cap and return clean containers to recycler or designated collection point.

If not recycling, crush or puncture empty containers. Dispose of the containers in accordance with applicable regional, national and local laws and regulations.

DO NOT burn empty containers or product.

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## **14; TRANSPORT INFORMATION:**

### **Land Transport (Australia) ADG Code:**

<b>UN Number</b>	UN3352
<b>Proper shipping name</b>	PYRETHROID PESTICIDE, LIQUID, TOXIC, N.O.S
<b>Hazard Class</b>	6.1
<b>Packing Group</b>	III
<b>Environmental hazard</b>	Yes
<b>Special Provisions</b>	
<b>Description</b>	UN 3352 PYRETHROID PESTICIDE, LIQUID, TOXIC, N.O.S (Lambda-cyhalothrin)
<b>Hazchem code</b>	2X
<b>IERG:</b>	35

### **IMDG**

<b>UN/ID no</b>	UN3352
<b>Proper shipping name</b>	PYRETHROID PESTICIDE, LIQUID, TOXIC, N.O.S
<b>Hazard Class</b>	6.1
<b>Packing Group</b>	III
<b>EmS-No</b>	F-A, S-A
<b>Special Provisions</b>	
<b>Marine pollutant</b>	This material meets the definition of a marine pollutant
<b>Description</b>	UN 3352 PYRETHROID PESTICIDE, LIQUID, TOXIC, N.O.S (Lambda-cyhalothrin)

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## **15. REGULATORY INFORMATION:**

### **Safety, health and environmental regulations/legislation specific for the substance or mixture**

#### **National regulations**

##### **Australia**

APVMA : Australian Pesticides and Veterinary Medicines Authority

APVMA Approval: 65190/50369

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## **16. OTHER INFORMATION:**

**Issue Date** 14 January 2014



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**Revision Date** 21 September 2017  
**Revision Note** Revised to GHS format

## Key or legend to abbreviations and acronyms used in the safety data sheet

ADG	Australian Dangerous Goods
AS	Australian Standards
AS/NZS	Australian/New Zealand Standards
ATEmix	Acute Toxicity Estimate of mixture, calculation of toxicity of the mixture according to the EU Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CAS	Chemical Abstracts Service (Registry Number)
GHS	Globally Harmonized System of Classification and Labelling of Chemicals, a globally harmonized system for classification and labelling of chemicals proposed by the United Nations.
HAZCHEM	An emergency action code of numbers and letters which gives information to emergency services.
IERG	Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB 76:2010 Standards Australia/Standards New Zealand).
IMDG	International Maritime Dangerous Goods Code for transport by sea.
LC 50	LC stands for lethal concentration which causes the death of 50% (one half) of a group of test population.
LD 50	LD stands for lethal dose which causes the death of 50% (one half) of a group of test population.
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average

## Disclaimer

**The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**