

## MATERIAL SAFETY DATA SHEET

<b>COMPANY DETAILS:</b> Syngenta Crop Protection Limited Tower II, Level 7, 110 Symonds Street Private Bag 92618, Symonds Street AUCKLAND NEW ZEALAND	Telephone No.: (weekdays) 09 - 306 1500  National Poisons & Hazchem Information Centre : 0800 POISON (0800 764 766)  Emergency No. (24 Hours) 0800 734 607
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### IDENTIFICATION

**PRODUCT NAME:** KARATE ò ZEONò

<b>Formulation type:</b>	Capsule suspension	<b>Dangerous Goods Class/ subsidiary risk:</b>	6.1
<b>Active Ingredients:</b>	lambda -cyhalothrin	<b>Hazchem Code:</b>	2X
<b>Product Code No.:</b>	A12871F	<b>Packaging Group:</b>	III
<b>Chemical types</b>	synthetic pyrethroid	<b>Toxic Substances</b>	S 3
<b>UN Number:</b>	3352	<b>Schedule:</b>	
		<b>Marine Pollutant</b>	Yes

**Proper Shipping Name:** PYRETHROID PESTICIDE , LIQUID, TOXIC  
(CONTAINS LAMBDA-CYHALOTHRIN 25%) MARINE POLLUTANT

**USE:** Insecticide for control of insect pests in citrus, grapes, vegetables, tomatoes, beans, onions, potatoes, maize, sweetcorn, white clover seed crops and forage brassicas.

### PHYSICAL DESCRIPTION/PROPERTIES

<b>Appearance:</b>	Beige liquid	<b>Flash point:</b>	Not available
<b>Odour:</b>	non specific	<b>Flammability:</b>	Not available
<b>Vapor pressure:</b>	Not available	<b>Behaviour in water:</b>	Dispersible

### OTHER PROPERTIES

<b>Specific gravity:</b>	1.0956 at 20°C	<b>pH : (1% aq)</b>	5.43
<b>Surface tension:</b>	Not available	<b>Boiling point:</b>	Not available
<b>Explosive properties</b>	Not available	<b>Auto-ignition temp.:</b>	Not available
<b>Corrosiveness:</b>	Not available	<b>Combustibility:</b>	Non -combustible
<b>Reactivity:</b>	Not available	<b>Viscosity:</b>	79.7 mPas

### INGREDIENTS -

	CAS No.	Content (%w/v)
<b>Lambda cyhalothrin (technical grade)</b>	91465-08-6	25
to give <b>Lambda cyhalothrin</b>		to 100
other ingredients determined not to be hazardous		

### HEALTH HAZARD INFORMATION

#### HEALTH EFFECTS

##### **ACUTE**

##### Toxicity

- This product is unlikely to present a toxicity hazard during normal use

Swallowed: Tests on rat (LD<sub>50</sub> 180-245 mg/kg)

Dermal absorption: Tests on rat (LD<sub>50</sub> >2000 mg/kg)

Inhaled: Active ingredient LC<sub>50</sub> 0.06 mg/L/4 hours. rat

##### Irritation

Eye: Mild irritant (rabbit)

Skin: Mild irritant ( rabbit)

#### **Sensitisation**

Skin: Mild skin sensitiser (guinea pig)

#### **Poisoning symptoms:**

Swallowed : Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain, ataxia, unsteady gait, hyperexcitability, salivation, tremors and incontinence. Large doses can cause convulsions and loss of consciousness. If the patient is uncoordinated there is a greater likelihood of vomit entering the lungs and causing complications.

Eye : A mild eye irritant.

Skin: Contact with skin may result in irritation. Will have a degreasing action on the skin. Repeated prolonged skin contact may lead to irritant contact dermatitis. May cause tingling, burning, itching, or numbness in exposed areas which is transient, that last up to 36 hours. Lambda cyhalothrin can be absorbed through the skin. Effects can include those described SWALLOWED.

Inhaled: Inhalation of mists or aerosols may produce respiratory irritation. High levels of exposure may result in effects described under SWALLOWED.

#### **CHRONIC**

No information available

#### **FIRST AID**

**In case of poisoning by any exposure route contact a doctor or Poisons Information Centre.**

Swallowed: If poisoning occurs contact a doctor or Poisons Information Centre. If swallowed DO NOT induce vomiting. Rinse mouth with water. Give plenty of water to drink. Begin artificial respiration if victim is not breathing. Use mouth to nose rather than mouth to mouth.

Eye: Flush with large quantities of clean tap water for at least 15 minutes. It is advisable to seek medical assistance.

Skin: Remove contaminated clothing and wash affected areas thoroughly with soap and water. The component lambda cyhalothrin can be absorbed through the skin with toxic effects. Seek immediate medical advice.

Inhaled: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. If breathing is laboured or patient is cyanotic (blue) , ensure airways are clear and have qualified person to give oxygen through a face mask. If breathing has stopped apply artificial respiration at once. Seek medical assistance.

#### **ADVICE TO DOCTOR**

Treat symptomatically.

## **PRECAUTIONS FOR USE**

**ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS**

#### **EXPOSURE STANDARDS**

No exposure standards have been set for the components of this product. However the supplier recommends a time weighted average of  $0.04\text{mg}/\text{m}^3$ . All atmospheric contamination should be kept to as low as is workable

#### **ENGINEERING CONTROLS**

Ensure adequate ventilation. Avoid inhaling mists. Keep container closed when not in use.

#### **PERSONAL PROTECTION**

Will irritate the eyes and skin. Avoid contact with eyes and skin.

When opening the container and preparing the dilute solution wear

- cotton overalls buttoned to the neck and wrist (or equivalent clothing)
- washable hat
- elbow-length PVC gloves

- face shield
- if inhalation risk wear organic vapour /particulate respirator

When using the prepared solution wear

- cotton overalls buttoned to the neck and wrist (or equivalent clothing) and
- elbow-length PVC gloves.
- face shield or goggles
- Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing
- if inhalation risk wear high efficiency organic vapour /particulate respirator.

## FLAMMABILITY

Non combustible.

## SAFE HANDLING INFORMATION

### STORAGE AND TRANSPORT

This material is a S3 toxic substance and must be stored, maintained and used in accordance with the relevant regulations

Store in tightly sealed original containers in a dry, cool, well ventilated, secure place away from fertilisers, seed, feed and food. Store out of direct sunlight. Keep out of reach of children, unauthorised persons and animals.

### SPILLS AND DISPOSAL

In case of spillage it is important to take all steps necessary to:

- Avoid eye and skin contact.
- Avoid contamination of waterways

#### *Procedure for spill:*

- (1) Keep all bystanders away.
- (2) Wear goggles, half face-piece respirator with combined dust and vapour cartridge, full length clothing and PVC gloves.
- (3) Reposition any leaking containers so as to minimise further leakage. Prevent runoff into drains and waterways.
- (4) Dam and absorb spill with an absorbent material (e.g. sand or soil).
- (5) Shovel the absorbed spill into drums. Ensure area is completely clean.
- (6) Contain in a secure location until disposal method is established.
- (7) Decontaminate the spill area with detergent and water and rinse with water
- (8) Prevent runoff from entering drains and waterways

#### *Dispose of empty, used containers by:*

- (a) Triple rinse or preferably pressure rinse containers with water. Add the rinsings to the spray tank. DO NOT dispose of undiluted chemicals on site.
- (b) If recycling, replace cap and return clean containers to recycler or designated collection point.
- (c) If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.
- (d) Refer to Local Regional Council.

### FIRE/EXPLOSION HAZARD

This product is non combustible. However following evaporation of aqueous component residual material may burn. Extinguish warehouse and factory fires using water fog ( or if unavailable fine water spray) ,foam, dry agent ( carbon dioxide, dry chemical powder). During a fire this product will release smoke and toxic products. When fighting a fire wear an air-supplied respirator. Do not allow runoff or product to enter drains.

### OTHER INFORMATION

**Lambda cyhalothrin** :Very toxic to aquatic organisms. fish 96 hr LC<sub>50</sub> 44 ug/l Rainbow trout. Very toxic to bees oral LD<sub>50</sub> 38ng/bee dermal LD<sub>50</sub> 909ng/bee.

**Note:** This product is a registered agricultural chemical and must therefore be used in accordance with the container label directions. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the Government health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

<b>CONTACT POINT:</b>	Business Manager - Crop Protection:	(09) 306 1500
	<b>24 HOURS EMERGENCY CONTACT:</b>	<b>0800 734 607</b>

This Material Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

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