



**IVORYCHEM PTE LIMITED**  
15 Beach Road #02-09, Beach Centre  
Singapore 189677  
Tel: +65 – 6337 7765  
Fax: +65 – 6337 7730  
Email: [contact@ivorychem.com](mailto:contact@ivorychem.com)  
Web: [www.ivorychem.com](http://www.ivorychem.com)  
Co. Registration No. 200405572W  
GST Registration No. 200405572W

## MATERIAL SAFETY DATA SHEET

### IMPACT 5 EC HERBICIDE

**Version:** Global  
**Date Approved:**  
**Revision No:** 1

#### CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** IMPACT® 5 EC INSECTICIDE AND ACARICIDE

**ACTIVE INGREDIENT:** Lambda Cyhalothrin

**CHEMICAL CLASS:** A pyrethroid insecticide

**CHEMICAL NAME OF ACTIVE INGREDIENT(S):** [1a(S\*),3a(Z)]-cyano(3-phenoxyphenyl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate

**MOLECULAR FORMULA:**

**SYNONYMS:**

#### MANUFACTURER

IVORYCHEM PTE LTD  
15 Beach Road, #02-09  
Beach Centre  
Singapore 189677  
Tel: +65 63377765  
Fax: +65 63377730

#### Emergency Telephone Numbers:

**Emergency Phone** [contact@ivorychem.com](mailto:contact@ivorychem.com) (Please refer local label for Emergency Numbers in your region).

#### COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Wt.%	PEL/TLV	EC No.	EC Class
Lambda Cyhalothrin	91465-08-6	5	None	None	None
Other ingredients	-	95	None	None	None

#### HAZARDS IDENTIFICATION

**SYMPTOMS OF ACUTE EXPOSURE:** May cause eye and skin irritation. Allergic skin reactions are possible. May cause temporary itching, tingling, burning or numbness of exposed skin, called paresthesia. Exposure to high vapor levels may cause headache, dizziness, numbness, nausea, incoordination, or other central nervous system effects.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Can decompose at high temperatures forming toxic gases.

#### PHYSICAL PROPERTIES

Appearance: Off-white liquid



## IVORYCHEM PTE LIMITED

15 Beach Road #02-09, Beach Centre  
Singapore 189677  
Tel: +65 – 6337 7765  
Fax: +65 – 6337 7730  
Email: [contact@ivorychem.com](mailto:contact@ivorychem.com)  
Web: [www.ivorychem.com](http://www.ivorychem.com)  
Co. Registration No. 200405572W  
GST Registration No. 200405572W

Odor: Slight odor/typical aromatic solvent

**UNUSUAL FIRE, EXPLOSION AND REACTIVITY HAZARDS:** During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

### FIRST AID MEASURES

Have the product container, label or Material Safety Data Sheet with you when calling a poison control center or doctor, or going for treatment.

**INGESTION:** Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**EYE CONTACT:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice..

**SKIN CONTACT:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**INHALATION:** Move person to fresh air. If person is not breathing, call an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

**NOTE TO PHYSICIAN:** There is no specific antidote if this product is ingested. Treat symptomatically. Skin contact paresthesia effects (itching, tingling, burning or numbness) are transient, lasting up to 24 hours. Treat symptomatically. Contains petroleum distillate - vomiting may cause aspiration pneumonia.

**MEDICAL CONDITION LIKELY TO BE AGGRAVATED BY EXPOSURE:** None known.

### FIRE FIGHTING MEASURES

#### FIRE AND EXPLOSION

Flash Point (Test Method): > 212°F (Setaflash)

Flammable Limits (% in Air): Lower: % Not Applicable. Upper: % Not Applicable

Autoignition Temperature: Not Available

Flammability: Not Applicable

**UNUSUAL FIRE, EXPLOSION AND REACTIVITY HAZARDS:** During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

#### IN CASE OF FIRE

Use dry chemical, foam or CO2 extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.



## IVORYCHEM PTE LIMITED

15 Beach Road #02-09, Beach Centre  
Singapore 189677  
Tel: +65 – 6337 7765  
Fax: +65 – 6337 7730  
Email: [contact@ivorychem.com](mailto:contact@ivorychem.com)  
Web: [www.ivorychem.com](http://www.ivorychem.com)  
Co. Registration No. 200405572W  
GST Registration No. 200405572W

### ACCIDENTAL RELEASE MEASURES

#### In Case of Spill or Leak

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions in Protective Equipment Section. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

### HANDLING AND STORAGE

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

### EXPOSURE CONTROLS / PERSONAL PROTECTION

**INGESTION:** Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

**EYE CONTACT:** Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**SKIN CONTACT:** Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

**INHALATION:** A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH approved respirator with any R, P or HE filter.

### PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Off-white liquid

**ODOR:** Slight odor/typical aromatic solvent

**MELTING POINT:** Not Applicable

**BOILING POINT:** 212°F

**SPECIFIC gravity/DENSITY:** 1.04 @ 68°F (20°C)

**pH:** 7.3 (1% w/w dilution in deionized water)

**SOLUBILITY IN H<sub>2</sub>O:** 0.004 mg/l

**VAPOR PRESSURE:** 1.5 x 10<sup>(-9)</sup> mmHg @ 68°F (20°C)

### STABILITY AND REACTIVITY

**STABILITY:** Stable under normal use and storage conditions.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** None known.



**IVORYCHEM PTE LIMITED**  
15 Beach Road #02-09, Beach Centre  
Singapore 189677  
Tel: +65 – 6337 7765  
Fax: +65 – 6337 7730  
Email: contact@ivorychem.com  
Web: www.ivorychem.com  
Co. Registration No. 200405572W  
GST Registration No. 200405572W

**MATERIALS TO AVOID:** None known.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Can decompose at high temperatures forming toxic gases.

## TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY/IRRITATION STUDIES (FINISHED PRODUCT)

Ingestion:	Oral (LD50 Rat) :	> 5,000 mg/kg body weight
Dermal:	Dermal (LD50 Rabbit) :	> 2,000 mg/kg body weight
Inhalation:	Inhalation (LC50 Rat) :	> 4.62 mg/l air - 4 hours
Eye Contact: Skin Contact: Skin Sensitization:	Mildly Irritating (Rabbit) Moderately Irritating (Rabbit) A weak skin sensitizer in animal tests.	

**REPRODUCTIVE/DEVELOPMENTAL EFFECTS:** Not a developmental or reproductive toxicant.

**CHRONIC/SUBCHRONIC TOXICITY STUDIES:** Reversible paresthesia (abnormal skin sensation). Reversible clinical signs of neurotoxicity in mammals.

**CARCINOGENICITY:** No treatment-related tumors in rats or mice.

### OTHER TOXICITY INFORMATION

In humans, contact with exposed skin may result in temporary itching, tingling, burning or numbness, called paresthesia. The effect may result from splash, aerosol, or hot vapor contact, or transfer to the face from contaminated gloves and hands. The symptoms normally disappear within 24 hours. Face and genital areas are especially susceptible to this effect. Paresthesia involving the face is also known as "subjective facial sensation" or SFS.

## ECOLOGICAL INFORMATION

**SUMMARY OF EFFECTS:** Slightly toxic to birds. Highly toxic to fish, invertebrates and bees.

**ECO-ACUTE TOXICITY:** Bees LC50/EC50 0.038 ug/bee  
Invertebrates (Water Flea) LC50/EC50 0.00036 ppm  
Fish (Trout) LC50/EC50 0.00024 ppm  
Fish (Bluegill) LC50/EC50 0.00021 ppm  
Birds (8-day dietary - Bobwhite Quail) LC50/EC50 > 5,300 ppm  
Birds (8-day dietary - Mallard Duck) LC50/EC50 > 3,948 ppm

**ECO-CHRONIC TOXICITY:** Not Available

**ENVIRONMENTAL FATE:** Not persistent in soil or water. Immobile in soil. Sinks in water (after 24 h).



## IVORYCHEM PTE LIMITED

15 Beach Road #02-09, Beach Centre  
Singapore 189677  
Tel: +65 – 6337 7765  
Fax: +65 – 6337 7730  
Email: [contact@ivorychem.com](mailto:contact@ivorychem.com)  
Web: [www.ivorychem.com](http://www.ivorychem.com)  
Co. Registration No. 200405572W  
GST Registration No. 200405572W

### DISPOSAL CONSIDERATIONS

**PESTICIDE DISPOSAL:** Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent) and offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke. For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedure and disposal of wastes.

### TRANSPORT INFORMATION

#### DOT PROPER SHIPPING NAME:

Ground Transport - NAFTA

Containers < 450 liters: Not regulated.

Containers > 450 liters:

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Lambda-Cyhalothrin)

Hazard Class or Division: Class 9

Identification Number: UN 3082

Packing Group: PG III

Air Transport - NAFTA

Containers < 450 liters: Not regulated.

Containers > 450 liters: Prohibited.

#### B/L FREIGHT CLASSIFICATION

Insecticides, NOIBN, O/T Poison

#### COMMENTS

Water Transport - International

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Lambda-Cyhalothrin), Marine Pollutant

Hazard Class or Division: Class 9

Identification Number: UN 3082

Packing Group: PG III

IMDG EMS #: F-A, S-F

Air Transport - International

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Lambda-Cyhalothrin)

Hazard Class or Division: Class 9

Identification Number: UN 3082

Packing Group: PG III

Packing Auth.: 914

Note: Max. inner packages 5 liters

Max. single packages 450 liters



**IVORYCHEM PTE LIMITED**

15 Beach Road #02-09, Beach Centre

Singapore 189677

Tel: +65 – 6337 7765

Fax: +65 – 6337 7730

Email: [contact@ivorychem.com](mailto:contact@ivorychem.com)

Web: [www.ivorychem.com](http://www.ivorychem.com)

Co. Registration No. 200405572W

GST Registration No. 200405572W

**REGULATORY INFORMATION**

NA

**OTHER INFORMATION**

Section(s) Revised : New Format