

Safety Data Sheet

LambdaStar Plus

SDS: 5/4/15

Section 1 – Chemical Product and Company Identification

Product Name: LambdaStar Plus

CAS # 91465-08-6

EPA Reg. #: 71532-29-91026

Product Use: Restricted Use Insecticide

Company Identification: LG Life Science America Inc.
910 Sylvan Avenue
Englewood Cliffs, NJ 07632

Emergency call: 201-816-2310

Section 2 – Hazards identification

Classification of substance:



Fatal if swallowed.

Very Toxic to aquatic life.

Very Toxic to aquatic life with long lasting effects.

May causes an allergic skin reaction

Cause Eye Irritation.

Cause mild skin irritation.

Toxic if inhaled

GHS labeling elements:

The substance is classified and labeled according to the Globally Harmonized System (GHS):

Hazard pictograms:



GHS06

GHS09

Signal Word: Danger

Hazard-determined components of labeling: Lambda-cyhalothrin

Hazard statements:

Fatal if swallowed.

Very Toxic to aquatic life.

Very Toxic to aquatic life with long lasting effects.

May causes an allergic skin reaction

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Toxic if inhaled

Cause Eye Irritation.

Cause mild skin irritation.

Precautionary Statements:

If Swallowed: Rinse mouth and Do not induce vomiting. Immediately call a Poison Center/doctor.

If in Eye: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

If on Skin: Remove all contaminated clothing. Rinse with water. If skin irritation occurs seek medical advice/attention.

If Inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing. Wash contaminated clothing before reuse.

Storage/Disposal: Storage locked up and Dispose of contents and containers accord to local, state and federal law.

Section 3 – Composition/information of ingredient

		Percent	CAS No.
Lambda-cyhalothrin	Lambda-cyhalothrin:[1a(S),3a(Z)]-(±)cyano(3-phenoxyphenyl)methyl-3-(2-chloro-3,3,3-trifluoro-1-proenyl)-2,2-dimethylcyclopropanecarboxylate	23.28%	91465-08-6
Other Ingredients	Non-toxic and non-hazardous*	76.72%	

* Proprietary components

Section 4 – First Aid Measures

Symptoms	Exposure to Lambda-cyhalothrin may cause a skin sensation called paresthesia, which is usually described as tingling, itching, burning, prickling, glowing, flushing, numbness or a chapped feeling. High levels of the active ingredient lambda-cyhalothrin may induce neurotoxic effects such as staggering gait, muscle tremors and convulsions.
Swallowed:	Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by the poison control center or doctor. DO not give anything by mouth to an unconscious person.
Eyes:	May cause irritation. Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
Skin:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes

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Inhalation:	May cause irritation. Remove to fresh air. If person stops breathing give them artificial respiration and get medical attention immediately.
Note to Physicians For current information about the treatment, consult a certified Regional Poison Control Center by calling the number listed in your local telephone directory.	

Section 5 – Fire Fighting Measure

Extinguishing media: Use dry powder or sand, carbon dioxide, or appropriate fire materials. Avoid use of water jets for extinguishing

Fire and Explosive Hazards: Not expected to be a fire or explosive hazard. May emit toxic fumes when heated to decomposition.

Special fire fighting procedures: Fireman should wear positive pressed freely breathing devices, complete fire protection clothes and shoes. Do not access if tank is on fire. Use water to cool exposed containers to extinguish fire. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Avoid inhalation of materials or combustion by-product. Vapor or gas is burned at distant ignition sources can be spread quickly.

Reference to other sections:

See Section 10 for decomposition products.

Section 6 – Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Wear approved respiratory protection, chemically compatible gloves and protective clothing. Keep unprotected person's way. Allow work against the wind and remove all people upwind. DO not direct water at spill or source leak.

Environmental precautions: Prevent runoff and contact with sources of water including but not limited to drains, sewers, lakes and ponds. Since emptied containers retain product residue (vapor, liquid, solid) follow all MSDS and label warnings even after container is empty. In case of large spill, inform the relevant authorities.

Methods and material for containment and cleaning up:

In case small leak or spill: contain material using sand or other non-combustible, let absorb, and dispose as waste. Don't contaminate any body of water. Sweep up material, place in a bottle, and hold for waste disposal.

In case large leak or spill: Stay upwind and keep out of low areas. Use dike to prevent spill from spreading and prevent from contaminating waterways. Notify local, state and federal authorities for further instructions.

Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Section 7 – Handling and Storage

Handling

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Precautions for safe handling: Do not inhale the steam prolonged or repeatedly. Use product only in well-ventilated place. Users should wash hands before eating and drinking. Do not contaminate water, food, or feed by storage.

Keep protective respiratory device available.

Conditions for Safe Storage, including any incompatibilities

Storage: Store in original container only. Avoid direct sunlight. Do not apply physical shock to container. Store locked up.

Requirements to be met by storerooms and receptacles: Store out of sun in cool place.

Reference to other sections:

See Section 10 for incompatibilities

Section 8 – Contact Controls and Personal Protection

Max allowed concentration: No Data

Way of measurement: No Data

Engineering Control: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep risk of inhalation low. Take safety shower and eye bath after handling.

Personal Protection

Respirators: Use NIOSH-approved respirator in accordance with health/safety regulations.

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles.

Body: Wear appropriate chemical resistant overalls and rubber boots and rubber gloves. Avoid any skin exposure.

Hands: Wear appropriate gloves, such as barrier laminate or Viton \geq 14mils.

General protective and hygienic measures: Discard clothing other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. No smoking, eating or drinking during handling. Change to clean clothes after washing.

Other conditions: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Section 9 – Physical and Chemical Properties

Information on basic physical and chemical properties

General Information:

Appearance and Physical State: Fluid (Capsule Suspension based on water), slightly aromatic odor

pH Value: 4.69

Vapor Pressure (25 °C): Not determined

Melting point: Not available

Boiling Point: Not applicable

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Specific Gravity: 1.03

Comparative concentration (water: 1): Not available (not required for end use)

Quantity of heat in burning (KJ/mol): Not available (not required for end use)

Density (g/cm³): 1.028 at 24°C

Critical pressure (Mpa): Not available

Critical temperature: Not available

Flash point (C): Not available

Burning temperature (C): Not available

Explosion: Not available

Solubility: Suspendable in water

Section 10 – Stability and Reactivity

Chemical Stability: This material is stable at the normal storage conditions.

Incompatible to Avoid: Strong acidic and alkali materials should be avoided.

Conditions to Avoid: Avoid accumulation of electrostatic charges, heating, flames, and hot surface.

Decomposition Products: Not Known to Occur. May emit toxic fume in a fire.

Hazardous Polymerization: No record

Reference to other sections:

See Section 5 for static discharge potential

Section 11 – Toxicological Information

Acute Toxicity:

LD/LC50 values that are relevant for classification:

Oral: LD₅₀ : 79, 55 mg/kg (males, females)

Inhalation: LC₅₀ > 0.57 mg/L

Dermal: LD₅₀ > 5000 mg/kg

Eyes: Mildly Irritating

Primary irritant effect:

If swallowed: Fatal if swallowed. No hazards anticipated from swallowing small amounts incidental to normal handling operation.

On eyes: Cause Eye Irritation

On the skin: Slightly Irritating

Respiratory sensitization: Single exposure to dust is not likely to be hazardous. Vapors are unlikely due to physical properties.

Skin Sensitization: Product is considered a contact sensitizer.

Germ Cell Mutagenicity: The chromosome aberration test was negative.

Carcinogenicity: This product has negative Ames test results.

Reproductive Toxicity: Not available

STOT-Single Exposure: Not available

STOT-Repeated Exposure: Not available

Aspiration Hazard: Not available

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Section 12 – Ecological Data

Eco-toxicity:

Fish acute toxicity (Bluegill): LC₅₀: 0.21 ug/l (24hr)

Algae acute toxicity: LC₅₀ > 0.1 mg/l (96hr)

Oaphnia acute toxicity: LC₅₀: 0.36ug/l (48hr)

Acute oral (Mallard duck): LD₅₀ > 3950 mg/kg

Toxicity to Beneficial Insects: Toxic to some non-target arthropods.

Eco-decomposition: No data available

Other: No data available

Section 13 – Disposal Considerations

Waste Disposal: Do not contaminate water, food, or feed by disposal. Dispose of waste in accordance with all applicable Federal, State, and local laws. Improper disposal of excess pesticide, spray mixture, or rinsate is violation of Federal Law. If this waste cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Do not distribute, make available, furnish or reuse empty containers. Triple rinse (or equivalent), then offer for recycling or reconditioning if container reuse is permitted. If container reuse is prohibited, puncture metal containers and dispose of in a sanitary landfill, or by other approved State and local authorities, if burned, stay out of smoke.

Section 14 – Transport Information

Proper Shipping Name: Pyrethroid Pesticides, Liquid, Toxic, N.O.S. (contains Lambda-Cyhalothrin)

Hazard Class or Division: Class 6.1

Identification Number: UN 3352

Packing Group: PGIII

Section 15 – Regulatory Data

Hazard Data	FIFRA Classification/Typical Hazard Labeling, as outlined in EPA Label Review Manual	OSHA HCS Requirement for Section 2 of SDS
Signal Word	WARNING	DANGER
Acute Toxicity, oral LD ₅₀ 79, 55 mg/kg (males, females)	(Category II) May be fatal if swallowed	(Category 2) Skull and Crossbones Fatal if swallowed
Acute Toxicity, dermal LD ₅₀ > 5000 mg/kg	(Category IV) Harmful if absorbed through	Not classified

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	skin	
Acute Toxicity, inhalation LD ₅₀ > 0.57 mg/L	(Category III) Harmful if inhaled	(Category 3) Toxic if inhaled
Skin Irritation	(Category III) Avoid contact with skin or clothing	(Category 3) Cause mild skin irritation
Eye Irritation	(Category III) Cause moderate eye irritation	(Category 2B) Causes eye irritation
Sensitization	Skin sensitizer Prolonged or frequently repeated skin contact may cause allergic reactions in some individual	(Category 1 Skin sensitizer) May cause an allergic skin reaction
Germ Cell Mutagenicity	Not labeled	Not classified
Carcinogenicity	Not labeled	Not classified
Reproductive/developmental Toxicity	Not labeled	Not classified
Specific target organ toxicity, single exposure	Not labeled	Not classified
Specific target organ toxicity, repeated exposure	Not labeled	Not classified
Aspiration	Not labeled	Not classified
Environmental (aquatic) toxicity	This pesticide is extremely toxic to fish and aquatic organisms and toxic to wildlife	Not within OSHA's jurisdiction and therefore not required on SDS- Optional GHS hazard statement: Very toxic to aquatic life and very toxic to aquatic life with long lasting effects

FIFRA Classification: This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also included other important information, including direction for use. Following is the hazard information as required on the pesticide label:

WARNING

RESTRICTED USE PESTICIDE

May be fatal if swallowed

Cause moderate eye irritation

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Harmful if absorbed through skin or inhaled

Avoid breathing vapor or spray mist.

Avoid contact with skin, eyes, or clothing.

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco

Remove and wash contaminated clothing before reuse

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

This pesticide is extremely toxic to fish and aquatic organisms and toxic to wildlife.

U.S. Regulatory Information: California Prop. 65-Development Toxicity, FIFIRA

International Regulatory Information: EINECS#218-161-2
Hazard code: Xn
Risk phrases: R20, R21, R22, R63
Safety phrases: S36/37/39
Canada: WHMIS Class D-2A

GHS labeling elements:

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Hazard pictograms:



GHS06

GHS09

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Hazard-determined components of labeling: Lambda-cyhalothrin

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Section 16 – Additional information

Reference: The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein. This Safety Data Sheet was compiled with data and information from the following source: KOSHA, NITE, ESIS, NLM, SIDS, IPCS

MSDS Date issue:

SDS Rev. Date: 5/4/15