

# Safety Data Sheet

**LambdaStar UltraCap 9.7%**

**SDS: 5/6/15**

## Section 1 – Chemical Product and Company Identification

**Product Name:** LambdaStar UltraCap 9.7%

**CAS #** 91465-08-6

**EPA Reg. #:** 71532-33-91026

**Product 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:**



Harmful if inhaled

Toxic to aquatic life with long lasting effects

**GHS labeling elements:**

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

**Hazard pictograms:**



**Signal Word:** Warning

**Hazard-determined components of labeling:** Lambda-cyhalothrin

**Hazard statements:**

Harmful if inhaled

Toxic to aquatic life with long lasting effects

**Precautionary Statements:**

**Prevention:** Avoid breathing dust/fume/gas/mist/vapour/spray.

Avoid release to the environment

**Response: If Inhaled:** Remove person to fresh air and keep at rest in a position comfortable for breathing. Wash contaminated clothing before reuse. Call a poison center or doctor/physician if you feel unwell.

Collect spillage

**NFPA Grade (0-4 level):** Health:2, Flammability:1, Reactivity: 0

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## Section 3 – Composition/information of ingredient

Chemical Name	Trade names and Synonyms	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	9.7%	91465-08-6
Water	Dihydrogen Oxide	70%	7732-18-5
Propylene Glycol	1,2-Dihydroxypropane	8%	57-55-6
	Proprietary components	12.3%	

## 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.
Eyes:	May cause irritation do not rub eyes. 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.
Swallowed:	May cause irritation. Do not induce vomiting unless told to do so by the poison control center or doctor. Rinse mouth with water immediately.
Skin:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes.
Inhalation:	May cause irritation. Remove to fresh air. If person stops breathing or irregular, give artificial respiration and supply oxygen.

### 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. Notify medical personnel of contaminated situation and have them take appropriate protective measure.

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### 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.

**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. 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. Inform the relevant authorities when emission at least standard amount. Dispose of waste in accordance with local regulation.

**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

**Precautions for safe handling:** Avoid direct physical contact. 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. Since emptied containers retain product residue (vapor, liquid, solid) follow all MSDS and label warnings even after container is empty. 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.

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

**Reference to other sections:**

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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 after handling equipment.

#### Personal Protection

**Respirators:** Under conditions of frequent use or heavy exposure, respirator equipment may be needed. Use any chemical cartridge respirators with organic vapor cartridge(s). Use any chemical cartridges respirator with a full facepiece and organic vapor cartridge. Use any air-purifying respirator with a full facepiece and an organic vapor canister. Use any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles such as splash resistant safety goggles with a secondary protection faceshield. Provide an emergency eye wash station and quick drench shower in the immediate work area.

**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. Wash contaminated clothing before reuse. 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

**Color:** Pale shade brown

**pH Value:** 6.6

**Viscosity:** 43.7 (40°C)

**Vapor Pressure (25 °C):** 1.02 g/ml

**Melting point:** Not available

**Boiling Point:** Not applicable

**Specific Gravity:** 1.03

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**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/cm<sup>3</sup>):** 1.028 at 24°C

**Critical pressure (Mpa):** Not available

**Critical temperature:** Not available

**Flash point (C):** > 250

**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.

**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:** LD<sub>50</sub> : > 5,000 mg/kg

**Inhalation:** LC<sub>50</sub> > 2.04 mg/L

**Dermal:** LD<sub>50</sub> > 5000 mg/kg

**Eyes:** Minimally Irritating

**Primary irritant effect:**

**On eyes:** Minimally irritating to the eye

**On the skin:** Slight irritating to skin

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

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

**Skin Sensitization:** Product is not 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

### Section 12 – Ecological Data

**Eco-toxicity:**

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<b>Fish acute toxicity:</b>	Lambda-cyhalothrin: LC <sub>50</sub> : 0.00021 mg/l (96hr) ( <i>Lepomis macrochirus</i> ) Propylene glycol: LC <sub>50</sub> : 710 mg/l (96hr) ( <i>Oncorhynchus mykiss</i> )
<b>Crustaceans acute toxicity:</b>	Lambda-cyhalothrin: LC <sub>50</sub> : 0.0000068 mg/l (48hr) (Other) Propylene glycol: LC <sub>50</sub> : 1000mg/l (48hr) ( <i>Daphnia magna</i> )
<b>Algae acute toxicity:</b>	Propylene glycol: LC <sub>50</sub> : 1000mg/l (72hr) ( <i>Selenastrum capricornutum</i> )
<b>Toxicity to Beneficial Insects:</b>	Toxic to some non-target arthropods.
<b>Bioaccumulative potential:</b>	Lambda-cyhalothrin: BCF 1063 (Has the potential bioaccumulation) Propylene glycol: BCF > 1
<b>Biodegradation potential:</b>	Lambda-cyhalothrin: It does not decompose. Propylene glycol: Biodegradable > 60% in 10 days.
<b>Mobility in Soil:</b>	Lambda-cyhalothrin: Koc 151200 (can be adsorbed in the soil).
<b>Other:</b>	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 the 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**

#### **DOT CLASSIFICATION:**

**Non-bulk:** Not regulated and requires no markings, label, or placards.

(Note: Combination packages with inner packages less than 5 liters may be re-classified as Consumer Commodities (ORM-D). These packages cannot be shipped by air freight).

**Bulk:** UN3082, Environmentally hazardous substance, liquid, n.o.s.  
(lambdacyhalothrin), 9,PGIII, marine pollutant.

#### **INTERNATIONAL TRANSPORTATION:**

**IMO (vessel):** UN3082, Environmentally hazardous substance, liquid, n.o.s.  
(lambdacyhalothrin), 9,PGIII, marine pollutant.

**IATA (air):** UN3082, Environmentally hazardous substance, liquid, n.o.s.  
(lambdacyhalothrin), 9,PGIII, marine pollutant.

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**Storage:** Store in a cool place, keeping away from heat and light.

## 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	CAUTION	WARNING
Acute Toxicity, oral LD <sub>50</sub> > 5,000 mg/kg	(Category IV) No required hazard labeling	Not classified
Acute Toxicity, dermal LD <sub>50</sub> > 5000 mg/kg	(Category IV) No required hazard labeling	Not classified
Acute Toxicity, inhalation LD <sub>50</sub> > 2.04 mg/L	(Category IV) No required hazard labeling	(Category 4) Exclamation mark Harmful if inhaled
Skin Irritation	(Category IV) Not required hazard labeling	Not classified
Eye Irritation	Cause Moderate eye irritation	Not classified
Sensitization	Not labeled	Not classified
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 product is extremely toxic to fish and other aquatic organisms	Not within OSHA's jurisdiction and therefore not required on SDS-Optional GHS statement: 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.

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Following is the hazard information as required on the pesticide label:

### CAUTION

Causes moderate eye irritation

Avoid contact with eyes, skin or clothing.

Avoid breathing spray mist

Wear protective eyewear

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

Remove and wash contaminated clothing before reuse

This product is extremely toxic to fish and other aquatic organisms.

### **National and/or international regulatory information:**

**POPs Management Law:** Not applicable

#### **Information of EU Classification**

\***Classification:** Lambda-cyhalothrin: T+;R26 T; R25 Xn; R21 N;R50-53

\***Risk Phrases:** Lambda-cyhalothrin: R21, R25, R26, R50/53

\***Safety Phrase:** Lambda-cyhalothrin: S1/2, S28, S36/37/39, S38, S45, S60, S61

#### **U.S. Federal Regulations**

\***OSHA Process Safety (29CFR1910.119):** Not Applicable

\***CERCLA Section 103 (40CFR302.4):** Not Applicable

\***EPCRA Section 302 (40CFR355.30):** Not Applicable

\***EPCRA Section 304 (40CFR355.40):** Not Applicable

\***EPCRA Section 313 (40CFR372.65):** Not Applicable

**Rotterdam Convention listed Ingredients:** Not Applicable

**Stockholm Convention listed Ingredients:** Not Applicable

**Montreal Protocol listed Ingredients:** Not Applicable

#### **GHS labeling elements:**

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

#### **Hazard pictograms:**



GHS07

GHS09

**Signal Word:** Warning

**Hazard-determined components of labeling:** Lambda-cyhalothrin

#### **Hazard statements:**

Harmful if inhaled

Toxic to aquatic life with long lasting effects

#### **Precautionary Statements:**



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**Prevention:** Avoid breathing dust/fume/gas/mist/vapour/spray.

Avoid release to the environment

**Response: If Inhaled:** Remove person to fresh air and keep at rest in a position comfortable for breathing. Wash contaminated clothing before reuse. Call a poison center or doctor/physician if you feel unwell.

Collect spillage

**NFPA Grade (0-4 level):** Health:2, Flammability:1, Reactivity: 0

### **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

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