



	GSP Crop Science Ltd	
	SAFETY DATA SHEET	
	Lambda-Cyhalothrin 5% EC	

Version 03	Revision Date 12.02.2024	This version replaces all previous versions.
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SECTION 1: Identification of the substance or mixture and of the supplier		
1.1 Product identifier		
Product	:	Lambda-cyhalothrin 5% EC
Substance/mixture	:	Mixture
1.2 Other means of identification		
Trade Name	:	-
1.3 Recommended use of the chemical and restrictions on use		
Identified uses	:	Insecticide
Use advised against	:	No data available
1.4 Supplier's details		
Name	:	GSP Crop Science Limited
Address	:	404, Lalita Complex, Rasala Road, Mithakhali Six Road, Navrangpura, Ahmedabad- 380009, Gujarat, India.
Phone number	:	+91-79 26466580
Email address	:	info@gspcrop.in
1.5 Emergency phone number		
	:	+91 79 22900451 +91 79 61915111 +91 79 61915151 Timing: IST 9 :30 to 17:30 hrs.
SECTION 2: Hazards identification		
2.1 GHS classification of the substance/mixture		
Hazard Category	:	Acute toxicity (oral) Category 4 Acute toxicity (Inhalation) Category 4 Serious eye damage/ irritation Category 2 Acute aquatic toxicity Category 1 Flammable liquids Category 4
2.2 GHS label elements		
Hazard Pictograms	:	 
Signal Word	:	Warning
Hazard Statements	:	H302 Harmful if swallowed H320 Causes eye irritation H332 Harmful if inhaled H400 Very toxic to aquatic life H410 Very toxic to aquatic life with long lasting effects H227 Combustible liquid
Supplement Hazard statements	:	--
Precautionary Statements		

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Prevention	:	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking P261 Avoid breathing dust/fume/gas/mist/vapors/spray. P264 Wash hands thoroughly after handling. P264+ 265 Wash hands thoroughly after handling. Do not touch eyes. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment.
Response	:	P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection P301+P317 IF SWALLOWED: Get medical help. P304+ 340 Remove person to fresh air and keep comfortable for breathing. P330 Rinse mouth. P370 + 378 In case of fire: Use appropriate method to extinguish. P391 Collect spillage.
Storage & Disposal	:	P403 Store in a well-ventilated place. P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

2.3 Other hazards which do not result in classification or are not covered by the GHS.

:	No data available
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SECTION 3 : Composition/information on ingredients

3.1 Substance : NA

3.2 Hazardous components of Mixture:

Chemical name/ Common Name	Content % (w/v)	CAS Number	Classification	Hazard statements
Lambda-cyhalothrin	4.5-5.5	91465-08-6	Acute (Oral) 3 Eye Irritation 2 Aquatic Acute 1 Aquatic Chronic 1	H301 H319 H400 H410
Other inert components	94.5-95.5	---	None	None

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	:	Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician, or going for treatment.
If inhaled	:	Supply fresh air, rest. If breathing is irregular, administer artificial respiration. Call a Physician.
In case of skin contact	:	Remove contaminated clothes. Rinse and then wash off the skin with plenty of water and soap.
In case of eye contact	:	Immediately flush with plenty of water. Remove any contact lenses and continue flushing for 15 minutes keeping the eyes wide open. If symptoms persist, call a Physician.
If swallowed	:	Rinse mouth. Do NOT induce vomiting. Refer for medical attention. If symptoms persist, call a Physician.

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4.2 Most important symptoms and effects, both acute and delayed		
Symptoms	:	Nonspecific. No further relevant information available.
4.3 Indication of any immediate medical attention and special treatment needed		
Treatment	:	No specific antidote available. Treat symptomatically.
SECTION 5: Firefighting measures		
5.1 Extinguishing media		
Suitable Extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.2 Specific hazards arising from the chemical		
Specific hazards during firefighting	:	As the product contains combustible organic ingredients, fire will produce dense black smoke containing hazardous products of combustion. Exposure to decomposition products may be a hazard to health.
5.3 Special protective actions for fire-fighters		
Advice for firefighters	:	In the event of fire, do not breathe fumes. Do not attempt to take action without suitable protective equipment, self-contained breathing apparatus & complete protective clothing.
Further information	:	Do not allow run-off from fire fighting to enter drains or water courses.
SECTION 6: Accidental release measures		
6.1 Personal precautions, protective equipment and emergency procedures		
Personal precautions	:	Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing fume. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from spill/fumes. For emergency responders: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2 Environmental precautions		
Environmental precautions	:	Prevent further leakage or spillage if safe to do so. Try not to let this chemical enter the environment. Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.
6.3 Methods and material for containment and cleaning up		
Handling and storage	:	Store and dispose of according to local regulations.
Methods for cleaning up	:	Collect spilled liquid with non-combustible absorbent material. Clean contaminated surface thoroughly. Clean with detergents. Avoid solvents.
SECTION 7: Handling and storage		
7.1 Precautions for safe handling		
Advice on safe handling	:	Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Keep the substance free from contamination. clean/dry the installation before use. Do not discharge the waste into the drain. Do not use compressed air for pumping over. Keep container tightly closed.

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		<p>work under local exhaust/ventilation. Exhaust gas must be neutralized. Hygiene measures: Do not eat, drink, or smoke when using this product.</p> <p>Wash hands and other exposed areas with mild soap and water before eating, drinking and when leaving work</p>
7.2 Conditions for safe storage, including any incompatibilities.		
Requirements for storage areas and containers	:	Keep in a well-ventilated room. Store in original tightly closed container. Keep out of reach of the children. Do not contaminate water, food, or feed by storage or disposal.
SECTION 8: Exposure controls/personal protection		
8.1 Control parameters		
Occupational Exposure limit values	:	No data available
Biological limit values	:	No data available
8.2 Appropriate engineering controls		
Engineering measures	:	Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.
8.3 Individual protection measures		
Eye Protection	:	Wear safety spectacles or eye protection.
Hand Protection	:	Protective gloves made of plastic or rubber. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Skin and body protection	:	Wear protective clothing, including boots, gloves, lab coat, apron or cover all, as appropriate to avoid skin contact.
Respiratory Protection	:	Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release.
SECTION 9: Physical and chemical properties		
i. Appearance (physical state, color)	:	Yellow liquid
ii. Odor	:	Characteristic odor
lii. Odor threshold	:	Not available
iv. Ph	:	6-7 (1% aqueous solution)
v. Melting point/freezing point	:	Not applicable
vi. Initial boiling point and boiling range	:	Not applicable
vii. Flash point	:	63°C
viii. Evaporation rate	:	Not available
ix. Flammability (solid, gas)	:	Not flammable
x. Upper/lower flammability or explosive limits	:	No data available
xi. Vapor pressure	:	No data available

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xii. Vapor density	:	No data available
xiii. Relative Density	:	0.85-0.95
xiv. Solubility(ies)	:	No data available
xv. Partition coefficient: n-octanol/water	:	No data available
xvi. Auto-ignition temperature	:	No data available
xvii. Decomposition temperature	:	No data available
xviii. Viscosity	:	Non-Newtonian at 20.0 and 40°C
xx. Others Surface tension	:	58.51 mN/m for 0.1% v/v solution and 47.77mN/m for neat sample at 20.0°C

SECTION 10: Stability and reactivity

10.1 Reactivity	:	None reasonably foreseeable.
10.2 Chemical stability	:	Stable under normal conditions
10.3 Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use.
10.4 Conditions to avoid	:	None known.
10.5 Incompatible materials	:	None known.
10.6 Hazardous decomposition products	:	No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Acute Toxicity

Exposure	Measurement (species)	Value	Hazard Category
Oral	LD ₅₀ (Rat) mg/kg body weight	500 (cut off value)	Category 4
Dermal	LD ₅₀ (Rat) mg/kg body weight	>2000	Category 5
Inhalation	LC ₅₀ (Rat) mg/l body weight	1.4	Category 4
Skin corrosion/irritation	(Rabbit)	Mild- irritant	Category 3
Serious eye damage irritation	(Rabbit)	Reversible irritant	Category 2A
Skin sensitization	(Guinea pig)	Not a sensitizer	Unclassified

11.2 Germ cell mutagenicity	:	Non-Mutagenic
11.3 Carcinogenicity	:	Non-Carcinogenic
11.4 Reproductive toxicity	:	No data available
11.5 STOT Repeated exposure	:	No data available

SECTION 12: Ecological information

12.1 Aquatic Toxicity (Technical)

Organism	Species	Unit	Value	Hazard Category
Toxicity to fish	Oncorhynchus mykiss (rainbow trout)	LC ₅₀ (96 hrs) mg/L	0.00036	Category 1

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Toxicity to aquatic invertebrates	Daphnia magna (Water flea)	EC ₅₀ (48 hrs) mg/L	0.00026	Category 1
Toxicity to aquatic plants	Algae	ErC ₅₀ (72 hrs) mg/L	1	Category 2

12.2 Persistence and degradability

	:	No data available
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12.3 Bioaccumulative potential

	:	Low bioaccumulation potential
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12.4 Mobility in soil

	:	Low mobility in soil
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12.5 Other adverse effects

Results of PBT and vPvB assessment	:	Not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).
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SECTION 13 : Disposal considerations

Waste treatment methods	:	Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.
Contaminated packaging	:	Empty remaining contents. Triple rinse containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN Number

ADR/RID: UN3082	IMDG: UN3082	IATA: UN3082
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14.2 UN Proper Shipping Name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Lambda- cyhalothrin	IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Lambda- cyhalothrin	IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Lambda- cyhalothrin
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14.3 Transport Hazard class(es)

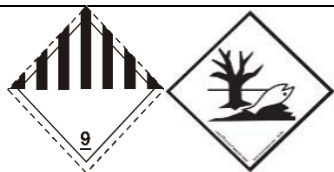
ADR/RID: 9	IMDG: 9	IATA: 9
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14.4 Packing group, if applicable

ADR/RID: III	IMDG: III	IATA: III
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14.5 Environmental hazards Marine pollutant

ADR/RID: Yes	IMDG: Yes	IATA: Yes
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14.6 Special precautions for user

	:	None
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14.7 Transport in bulk according to IMO instruments		
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code :	:	Not applicable for product as supplied.
SECTION 15: Regulatory information		
Safety, health and environmental regulations specific for the product in question.		
Full text of H-Statements	:	H302 Harmful if swallowed H320 Causes eye irritation H332 Harmful if inhaled H400 Very toxic to aquatic life H410 Very toxic to aquatic life with long lasting effects H227 Combustible liquid
REACH - Candidate List of Substances of Very High Concern for Authorisation	:	No
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	No
Regulation (EC) No 850/2004 on persistent organic pollutants	:	No
SECTION 16 : OTHER INFORMATION		
16.1 Information on revision		
Version 3 of SDS updated on 12.02.2024 for aligning it as per GHS format.		
16.2 Abbreviations and acronyms		
GHS	:	Globally Harmonized System
CAS	:	Chemical Abstracts Service
LC ₅₀	:	Lethal Concentration 50%
LD ₅₀	:	Lethal Dose 50%
EC ₅₀	:	Effective Concentration 50%
PBT	:	Persistent, Bioaccumulative and Toxic substance
vPvB	:	Very Persistent and Very Bioaccumulative
ADR	:	European Agreement concerning the International Carriage of Dangerous Goods by Road
RID	:	Regulation concerning the International Carriage of Dangerous Goods by Rail
IMDG	:	International Maritime Dangerous Goods
IATA	:	International Air Transportation Association
MARPOL	:	International Convention for the Prevention of Pollution from Ships
STOT	:	Specific target organ toxicity
16.3 References		
<ul style="list-style-type: none"> ECHA - European Chemicals Agency, website: https://echa.europa.eu/ The Pesticide Manual, British Crop Production Council https://unece.org/transport/dangerous-goods/ghs-rev10-2023 https://sitem.herts.ac.uk/aeru/ppdb/ 		

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<ul style="list-style-type: none"> Unpublished reports – GSP Crop Science Limited, India.v

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.