

SAFETY DATA SHEET

The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Lamdex 5 EC

Revision date 15-Sep-2022 Version 1.02 Supersedes Date: 13-Sep-2022 Product Code(s) INS05039-27

Print Date 15-Sep-2022

ADM.02750.I.3.C

1. Identification

Product identifier

Lamdex 5 EC

Other means of identification

Synonyms Lambda cyhalothrin 50 EC

Formulation type EC Registration Number(s) L7578

Recommended use of the chemical and restrictions on use

Recommended use Insecticide

Uses advised against No information available

Detailed information about the manufacturer, supplier, and/or importer

Supplier ADAMA SOUTH AFRICA (PTY) LTD

Ground Floor, Simeka House The Vineyards Office Estate

99 Jip de Jager Drive

Bellville 7530

Emergency telephone number

Emergency Telephone +27 82 446 8946 (Griffon Poison Centre)

+27 86 155 5777 (Tygerberg Poison Information Centre) +27 86 100 6366 and +27 83 253 6618 (SPILL TECH)

E-mail address SDS@ADAMA.COM

2. Hazard(s) identification

Classification of the substance or mixture

Aspiration hazard	Category 1 - (H304)
Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity (single exposure)	Category 3 - (H336)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)
Flammable liquids	Category 4 - (H227)

Label elements

Signal word Danger

Hazard pictograms



Hazard statements

H302 - Harmful if swallowed

H304 - May be fatal if swallowed and enters airways

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H336 - May cause drowsiness or dizziness

H410 - Very toxic to aquatic life with long lasting effects

H227 - Combustible liquid

Precautionary statements

P102 - Keep out of reach of children

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking

P243 - Take precautionary measures against static discharge

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling P264 + P265 - Wash face, hands and any exposed skin 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

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P301 + P316 - IF SWALLOWED: Get emergency medical help immediately

P301+317 - IF SWALLOWED: Get medical help

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing

P319 - Get medical help if you feel unwell

P330 - Rinse mouth

P331 - Do NOT induce vomiting

P337 + P317 - If eye irritation persists: Get medical help

P391 - Collect spillage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

Additional information

This product is classified as hazardous according to the criteria in South Africa - GHS classification and labelling of chemicals – SANS10234 and the Regulations for Hazardous

Chemical Agents - 2021.

Other hazards

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

3. Composition/information on ingredients

Substance

Not applicable

Mixture

Synonyms

Lambda cyhalothrin 50 EC

Chemical name	CAS No	Weight-%	EC No	INTERNATIONAL GHS CLASSIFICATION	M-Factor
Solvent naphtha, petroleum, heavy	64742-94-5	78-87	265-198-5	Flam. Liq. 4 (H227)	
arom.				Asp. Tox. 1 (H304)	
				STOT SE 3 (H336)	
				Acute auatic 2 (H401)	
				Aquatic Chronic 2 (H411)	
Castor oil ethoxylated	61791-12-6	5-8		Acute Tox. 4, oral (H302)	
lambda-cyhalothrin	91465-08-6	4-7	415-130-7	Acute Tox. 3 (H301)	M=10000
				Acute Tox. 4 (H312)	
				Acute Tox. 2 (H330)	
				Aquatic Acute 1 (H400)	
				Aquatic Chronic 1 (H410)	
2-Ethylhexane-1-ol	104-76-7	2-4		Acute toxicity, oral (H302)	
				Acute toxicity, dermal (H313) par	
				Skin Corr./Irrt. 2 (315) par Eye	
				Dam./Irrit. 1 (H318)	
				Aquatic Chronic 4 par STOT SE 3	
				(H335) par Flam. Liq. 3 (H226)	
calcium dodecylbenzenesulphonate	26264-06-2	1-3	247-557-8	Skin Irrit. 2 (H315)	
				Eye Dam. 1 (H318)	

Full text of H- and EUH-phrases: see section 16

Additional information

Note: The other ingredients do not cause or contribute towards the correct GHS classification of Lamdex 5 EC and are therefore, in terms of the South African Regulations for Hazardous Chemical Agents - 2021. Regulation 14(b), not listed in the table above.

4. First-aid measures

Description of necessary first aid measures

General advice In case of accident or if you feel unwell, seek medical advice immediately (show the label

where possible). First aider: Pay attention to self-protection.

Inhalation Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call

a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Consult a physician if necessary.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Get medical

attention immediately if symptoms occur.

Ingestion Rinse mouth. Do NOT induce vomiting. Get medical attention immediately if symptoms

occur.

For emergency responders

ADAMA Page 3/11

Self-protection of the first aider

Use personal protective equipment as required.

Most important symptoms/effects, acute and delayed

Symptoms None known.

Indication of immediate medical attention and special treatment needed, if necessary

5. Fire-fighting measures

Suitable Extinguishing Media

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

Keep product and empty container away from heat and sources of ignition. In the event of

fire, cool tanks with water spray.

Flammable properties Combustible material

Explosive properties No data available.

Specific/special fire-fighting measures

Specific/special fire-fighting

measures

No information available.

Special protective equipment and precautions for fire-fighters

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See

section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Ensure adequate ventilation. Avoid contact with

skin, eyes or clothing. Do not breathe dust.

Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage

if safe to do so.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far

ahead of liquid spill for later disposal.

Methods for cleaning up

Take precautionary measures against static discharges. Dam up. Soak up with inert

absorbent material. Pick up and transfer to properly labeled containers.

ADAMA Page 4/11

Prevention of secondary hazards

Clean contaminated objects and areas thoroughly observing environmental regulations.

Other information

Refer to protective measures listed in Sections 7 and 8.

7. Handling and storage

Preventive measures for safe handling

Advice on safe handling Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat,

hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use with local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. In case of

insufficient ventilation, wear suitable respiratory equipment.

Precautions for safe handling

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from

heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of

children. Store locked up. Store away from other materials.

8. Exposure controls/personal protection

Control parameters

Exposure guidelinesThis product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection Suitable chemical resistant gloves (EN 374) also with prolonged, direct contact

(recommendation: protection index 6, corresponding > 480 minutes Permeability time (permeation) according to EN 374): e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5

mm), butyl rubber (0.7 mm).

Eye/face protection Tight sealing safety goggles.

Skin and body protectionUse suitable protective clothing and equipment if required, such as safety goggles certified

to EN 166, gloves certified to EN 374, protective boots certified to EN 13832, and/or a water

repellent woven coverall with 65% polyester and 35 % cotton.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

ADAMA Page 5/11

No data available

Local authorities should be advised if significant spillages cannot be contained. **Environmental exposure controls**

9. Physical and chemical properties

Information on basic physical and chemical properties

Property	<u>Values</u>	Method	Remarks
Appearance			
Physical state	: Liquid		
Color	: yellow		
Odor	: Pungent		
Odor threshold	: No data available		
pH	: 6.0 - 7.0	CIPAC MT 75.3	solution (1%)
Melting point / freezing point °C	:		Not applicable
Boiling point / boiling range °C	: No data available		• • • • • • • • • • • • • • • • • • • •
Flash point °C	: 63	EEC A.9	
Evaporation rate	:		No data available
Flammability (solid, gas)	: Not applicable		Tto data available
Upper/lower flammability or	: No data available		
explosive limits	. 140 data available		
Vapor pressure kPa	•		Not applicable
Vapor density	: No data available		Not applicable
Relative density	: 0.87 - 0.97	EEC A.3	
•		220 7.3	Not applicable
Solubility(ies) mg/l	:		Not applicable
Partition coefficient Log Pow	:		See Section 12 for additional
			Ecological Information
Autoignition temperature °C	:		No data available
Decomposition temperature °C	: No data available		
Kinematic viscosity mm2/s 40 °C	C: 1.8 - 4.2	OECD 114	
Explosive properties	: No data available		
Oxidizing properties	: No data available		

Other information Bulk density g/ml : ----

10. Stability and reactivity

Reactivity

Surface tension

Particle Size

Reactivity No information available.

Chemical stability

Stability Stable under normal conditions.

Not applicable

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge

Possibility of hazardous reactions

Possibility of hazardous reactions
None under normal processing.

Conditions to avoid

Conditions to avoid Heat, flames and sparks. Excessive heat.

Incompatible materials

Incompatible materialsNone known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on toxicological effects

Acute toxicity

	<u>Values_</u>	<u>Species_</u>	<u>Method</u>	<u>Remarks</u>
Oral LD50 mg/kg	: 500	Rat	OECD 423	
Dermal LD50 mg/kg	: > 2000	Rat	OPPTS 870.1200)
Inhalation LC50 LC50	: 4.2	Rat	OPPTS 870.1300)
Skin corrosion/irritation	: Non-irritating to	the skin Rabbit	OPPTS 870.2500)
Serious eye damage/eye irritation	: Irritating to eyes	Rabbit	OPPTS 870.2400)
Sensitization	: Not a skin sensit	tizer Guinea pig	OPPTS 870.2600)

Chronic toxicity

Germ cell mutagenicity

Chemical name

lambda-cyhalothrin : Not classified

Carcinogenicity

Chemical name

lambda-cyhalothrin : Not Carcinogenic

Reproductive toxicity .

Chemical name

lambda-cyhalothrin : Not toxic for the reproductive system

STOT - Single Exposure

Chemical name

lambda-cyhalothrin : No data available

STOT - Repeated Exposure

Chemical name

lambda-cyhalothrin : No data available

Aspiration hazard Chemical name

lambda-cyhalothrin : No data available

12. Ecological information

Ecotoxicity

Aquatic toxicity

 Acute toxicity
 Values
 Species
 Method
 Remarks

 Fish 96-hour LC50 mg/l
 : 0.031
 Poecilia reticulata
 OECD 203

Crustacea 48-hour EC50 mg/l : ---- No data available

Revision date 15-Sep-2022

No data available Algae 72-hour EC50 mg/l Other plants EC50 mg/l No data available :

Chronic aquatic toxicity Values Species Method Remarks

Fish NOEC mg/l No data available Crustacea NOEC mg/l No data available Algae NOEC mg/l No data available Other plants NOEC mg/l No data available

Terrestrial Toxicity Birds Oral LD50 mg/kg

Chemical name

lambda-cyhalothrin : > 3950 Mallard duck

Bees Oral LD50 µg/bee

Chemical name

lambda-cyhalothrin : 0.909

Abiotic Degradation Water DT50 days **Chemical name**

No data available lambda-cyhalothrin

Soil DT50 days Chemical name

lambda-cyhalothrin No data available

Biodegradation Chemical name

lambda-cyhalothrin : No data available

Log Pow Method Remarks Values

Bioconcentration factor (BCF)

Chemical name

lambda-cyhalothrin Low bioaccumulation : ----

potential

Adsorption/Desorption Values Method Remarks

Chemical name

lambda-cyhalothrin Low mobility in soil

13. Disposal considerations

Disposal methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Improper disposal or reuse of this container may be dangerous and illegal.

14. Transport information

ADR

14.1 UN number UN3082

14.2 UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (lambda-cyhalothrin,

Solvent naphtha, petroleum, heavy arom.)

·

14.3 Transport hazard class(es) 9 Labels 9 14.4 Packing group III

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(lambda-cyhalothrin, Solvent naphtha, petroleum, heavy arom.), 9, III

14.5 Environmental hazard Ye

14.6 Special Precautions for Users

Special Provisions 274, 335, 601, 375

Classification code M6

RID

14.1 UN number UN3082

14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (lambda-cyhalothrin,

Solvent naphtha, petroleum, heavy arom.)

14.3 Transport hazard class(es) 9 Labels 9 14.4 Packing group III

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(lambda-cyhalothrin, Solvent naphtha, petroleum, heavy arom.), 9, III

14.5 Environmental hazard Yes

14.6 Special Precautions for Users

Special Provisions 274, 335, 375, 601

Classification code M6

<u>IMDG</u>

14.1 UN number UN3082

14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (lambda-cyhalothrin,

Solvent naphtha, petroleum, heavy arom.)

14.3 Hazard Class 9
14.4 Packing group III

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(lambda-cyhalothrin, Solvent naphtha, petroleum, heavy arom.), 9, III, Marine pollutant

14.5 Marine pollutant P
Environmental hazard Yes

14.6 Special Precautions for Users

Special Provisions274, 335, 969EmS-NoF-A, S-FIMDG Stowage and segregationCategory A

14.7. Transport in bulk according to No information available

Annex II of MARPOL and the IBC

Code

IATA

14.1 UN number UN3082

14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (lambda-cyhalothrin,

Solvent naphtha, petroleum, heavy arom.)

14.3 Transport hazard class(es) 9

14.4 Packing group

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(lambda-cyhalothrin, Solvent naphtha, petroleum, heavy arom.), 9, III Yes

14.5 Environmental hazard

14.6 Special Precautions for Users

Special Provisions A97, A158, A197

ERG Code 9L



* Note: UN3077 & UN3082 – These products may be transported as non-dangerous goods under the special provisions of IMDG Code 2.10.2.7; ADR SP375 and ICAO/IATA A197 when packed in single or inner packaging of up to 5L for liquids or 5 kg or less for solids

15. Regulatory information

Safety, health and environmental regulations specific for the product in question

Registration Requirements: Fertilizer, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947). Pesticide Handling, Storage and Disposal Safety: SANS10206: 2020. Safety Data Sheet and Occupational Exposure Limit Requirements: Regulations for Hazardous Chemical Agents – 2021 – SA Occupational Health and Safety Act. SANS11014:2010. Control of and handling of poisonous/hazardous and non-poisonous/non-hazardous substances/chemicals in workplaces: Hazardous Substances Act, 1973 (Act No.15 of 1973). Occupational Health and Safety Act No. 85 of 1993.

16. Other information

Full text of H-Statements referred to under section 3

H226 - Flammable liquid and vapor

H227 - Combustible liquid

H301 - Toxic if swallowed

H302 - Harmful if swallowed

H304 - May be fatal if swallowed and enters airways

H312 - Harmful in contact with skin

H313 - May be harmful in contact with skin

H315 - Causes skin irritation

H318 - Causes serious eye damage

H330 - Fatal if inhaled

H335 - May cause respiratory irritation

H336 - May cause drowsiness or dizziness

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H411 - Toxic to aquatic life with long lasting effects

Date of preparation of the SDS No data available

Revision date 15-Sep-2022

Revision NoteChanges made to the last version are labeled with this sign ***.

Key or legend to abbreviations and acronyms used in the safety data sheet

IMDG International Maritime Dangerous Goods (IMDG)
IATA International Air Transport Association (IATA)

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

Abbreviations and acronyms

European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN -European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

CAS Number -Chemical Abstracts Service number EC Number -**EINECS and ELINCS Number**

EINECS - European Inventory of Existing Commercial Substances

ELINCS - European List of notified Chemical Substances

International Air Transport Association

ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air

IMDG -International Maritime Dangerous Goods LC50 -Lethal Concentration to 50 % of a test population

LD50 -Lethal Dose to 50% of a test population (Median Lethal Dose) Organization for Economic Co-operation and Development OECD -

Persistent, Bioaccumulative and Toxic substance PBT -

Regulations concerning the International Carriage of Dangerous Goods by Rail RID -

STOT -Specific Target Organ Toxicity

Very Persistent and Very Bioaccumulative vPvB -

The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Classification of the mixture Classification procedure H302 - Harmful if swallowed Classification based on test data H304 - May be fatal if swallowed and enters airways Classification based on Calculation method H319 - Causes serious eye irritation Classification based on test data H332 - Harmful if inhaled Classification based on test data Classification based on Calculation method H336 - May cause drowsiness or dizziness

H400 - Very toxic to aquatic life Classification based on test data

H410 - Very toxic to aquatic life with long lasting effects Classification based on Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet