SAFETY DATA SHEET

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

Lambda Cyhalothrin 9.7 EW

Revision date 31-Dec-2023 **Version** 3 **Supersedes Date:** 20-Feb-2019 **Product Code(s)** INS00099-972

Print Date 01-Jan-2024 ADM.02750.I.2.A 9501784

1. Identification

Product identifier

Lambda Cyhalothrin 9.7 EW

Other means of identification

Synonyms	Senior
Formulation type	EW
Pure substance/mixture	Mixture

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 Makhteshim Ltd
PO Box 60
Beer Sheva 8410001 Israel

Emergency telephone number

Emergency Telephone	ADAMA Makhteshim: + 972 8 6560800/801 ; + 972 8 6296713/714 ADAMA Agan : + 972 8 8515341
E-mail address	SDS@ADAMA.COM

2. Hazard(s) identification

Classification of the substance or mixture

Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

Label elements

Signal word Warning

Hazard pictograms

Hazard statements

H302 - Harmful if swallowed
H332 - Harmful if inhaled
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements

P102 - Keep out of reach of children
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P501 - Dispose of contents/ container to an approved waste disposal plant

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 Senior

Chemical name	CAS No	Weight-%	EC No	INTERNATIONAL GHS CLASSIFICATION	M-Factor
lambda-cyhalothrin	91465-08-6	7-11	415-130-7	Acute Tox. 3 (H301) Acute Tox. 4 (H312) Acute Tox. 2 (H330) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	M=10000
Acetophenone	98-86-2	7-11	202-708-7	Acute Tox. 4 (H302) Eye Irrit. 2 (H319)	

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

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. If symptoms persist, call a physician.

Ingestion Rinse mouth. Drink plenty of water. Get medical attention immediately if symptoms occur.

For emergency responders

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

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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 No information available.

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 Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. Use personal protective equipment as required.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Pick up and transfer to properly labeled containers.
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	Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation. Do not eat, drink or smoke when using this product.

Precautions for safe handling

General hygiene considerations	Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

8. Exposure controls/personal protection

Control parameters

Exposure guidelines

Chemical name	ACGIH TLV
Acetophenone 98-86-2	TWA: 10 ppm

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	Wear suitable gloves.
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Wear suitable protective clothing.
General hygiene considerations	Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.
Environmental exposure controls	Local authorities should be advised if significant spillages cannot be contained.

9. Physical and chemical properties

Information on basic physical and chemical properties

Property		Values	Method	Remarks
Appearance				
Physical state	:	Liquid		
Color	:	white		
Odor	:	characteristic		
Odor threshold	:	No data available		
pH	:	4.8 - 5.8	CIPAC MT 75	1 % aqueous solution
Melting point / freezing point °C	:	No data available		
Boiling point / boiling range °C	:	No data available		
Flash point °C	:	No data available		
Evaporation rate	:	-		No data available
Flammability (solid, gas)	:	Not applicable		
Upper/lower flammability or explosive limits	:	No data available		
Vapor pressure kPa	:	No data available		Not applicable
Vapor density	:	No data available		
Relative density	:	1.0 - 1.1	CIPAC MT 3	20 °C
Solubility(ies) mg/l	:	No data available		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	:	78.676	ASTM D445/D446	
Explosive properties	:	No data available		
Oxidizing properties	:	Incompatible with oxidizing agents: 10% Potassium permanganate	44 Federal register	
Surface tension	:	No data available		No data available
Particle Size	:	Not applicable		

Other information

Bulk density g/ml : Not applicable

10. Stability and reactivity

Reactivity

Reactivity No information available.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid Excessive heat.

Incompatible materials

Incompatible materials None 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

		Values	Species	Method	Remarks
Oral LD50 mg/kg	:	310.2	Rat	OPPTS 870.1100	
Dermal LD50 mg/kg	:	> 5000	Rat	OPPTS 870.1200	
Inhalation LC50 LC50	:	2.02	Rat	OPPTS 870.1300	
Skin corrosion/irritation	:	Mild skin irritant	Rabbit	OPPTS 870.2500	
Serious eye damage/eye irritation	:	Not irritating to eyes	Rabbit	OPPTS 870.2400	
Sensitization	:	Not a skin sensitizer	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	:	No data available			No data available
Crustacea 48-hour EC50 mg/l	:	No data available			No data available
Algae 72-hour EC50 mg/l	:	No data available			No data available
Other plants EC50 mg/l	:	No data available			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				
lambda-cyhalothrin	: ----			No data available

Soil DT50 days				
Chemical name				
lambda-cyhalothrin	: ----			No data available

Biodegradation				
Chemical name				
lambda-cyhalothrin	: No data available			

Log Pow	**Values**	**Method**	**Remarks**

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

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)
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), 9, III, (-)
14.5 Environmental hazard	Yes
14.6 Special Precautions for Users	
Special Provisions	274, 335, 601, 375
Classification code	M6
Tunnel restriction code	(-)

RID

14.1 UN number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (lambda-cyhalothrin)
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), 9, III
14.5 Environmental hazard	Yes
14.6 Special Precautions for Users	
Special Provisions	274, 335, 375, 601
Classification code	M6

IMDG

14.1 UN number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (lambda-cyhalothrin)
14.3 Hazard Class	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (lambda-cyhalothrin), 9, III, Marine pollutant
14.5 Marine pollutant	P
Environmental hazard	Yes
14.6 Special Precautions for Users	
Special Provisions	274, 335, 969
EmS-No	F-A, S-F
IMDG Stowage and segregation	Category A
14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code	No information available

IATA

14.1 UN number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (lambda-cyhalothrin)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (lambda-cyhalothrin), 9, III
14.5 Environmental hazard	Yes
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

16. Other information

Full text of H-Statements referred to under section 3
H301 - Toxic if swallowed
H302 - Harmful if swallowed
H312 - Harmful in contact with skin
H319 - Causes serious eye irritation
H330 - Fatal if inhaled
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Date of preparation of the SDS No data available

Revision date 31-Dec-2023

Revision Note Changes 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
ADR - 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
IATA - 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)
OECD - Organization for Economic Co-operation and Development
PBT - Persistent, Bioaccumulative and Toxic substance
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
STOT - Specific Target Organ Toxicity
vPvB - Very Persistent and Very Bioaccumulative

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
H332 - Harmful if inhaled	Classification based on test data
H400 - Very toxic to aquatic life	Classification based on Calculation method
H410 - Very toxic to aquatic life with long lasting effects	Classification based on Calculation method

Disclaimer
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