

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form	: Mixture
Name	: Lambda 50 EC
Trade name	: Lambda 50 EC
Product code	: UPL_L8546

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Main use category	: Insecticide
Industrial/Professional use spec	: For agricultural, industrial and professional use only
Use of the substance/mixture	: An emulsifiable concentrate contact and stomach insecticide for the control of insects on crops as mentioned below.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

UPL South Africa (Pty) Ltd.
Sunbury Office Park (off Douglas Saunders Drive) 7
La Lucia Ridge
P.O. Box 1726, Mount Edgecombe, 4300
4019 Durban - South Africa
T +27 31 514 5600
www.upl-ltd.com/za

1.4. Emergency telephone number

Emergency number	: Griffon Poison Information Centre: 082 4468946, Poisons Information Helpline: 0861 555 777, In case of Spillage: Spill Tech: 086 100 0366 / 083 253 6618
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SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to SANS10234 and the Regulations for Hazardous Chemical Agents - 2021.**

Flammable Liquid, Category 4	H227
Acute toxicity (oral, dermal), Category 4	H302+H312
Acute toxicity (inhalation:dust,mist) Category 3	H331
Skin corrosion/irritation, Category 2	H316
Serious eye damage/eye irritation, Category 1	H318
Specific target organ toxicity — Repeated exposure, Category 2	H373
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements**Labelling according to SANS10234 and the Regulations for Hazardous Chemical Agents - 2021.**

Hazard pictograms



GHS06

GHS08

GHS05

GHS09

Signal word

: Danger

Hazardous ingredients

: lambda-cyhalothrin; Calcium dodecylbenzene sulphonate

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according to GHS classification and labelling of chemicals – SANS10234 and the Regulations for Hazardous Chemical Agents - 2021.

Hazard statements	: H227 - Combustible liquid. H302 - Harmful if swallowed or in contact with skin. H331 - Toxic if inhaled. H316 - Causes skin irritation. H318 - Causes serious eye damage. H373 - May cause damage to organs through prolonged or repeated exposure. H400 - Very toxic to aquatic life. H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements	: P101 – If medical advise is needed, have product container or label at hand. P102 – Keep out of reach of children P103 – Read carefully and follow all instructions. P210 - Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking. P261 – Avoid breathing dust/fume/gas/mist/vapors/spray. P264+P265 - 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. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P301+P317 – IF SWALLOWED: Get medical help. P302+P352 – IF ON SKIN: Wash with plenty of water. P304+P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P354+P338 – IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P316 – Get emergency medical help immediately. Call a Poison Centre. P317 – Get medical help. P319 – Get medical help if you feel unwell. P321 – Specific treatment (see first aid treatment on this label). P330 – Rinse mouth. P332+P317 – If skin irritation occurs: Get medical help. P362+P364 – Take off contaminated clothing and wash it before reuse. P370+P378 – In case of fire: Use foam, dry powder, carbon dioxide, water spray or sand to extinguish. 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 hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to SANS10234 and the Regulations for Hazardous Chemical Agents - 2021.
Distillates (petroleum), hydrotreated light	(CAS-No.) 64742-47-8 (EC-No.) 265-149-8 (EC Index-No.) 649-422-00-2 (REACH-no) 01-2119484819-18	>= 80	Asp. Tox. 1, H304
lambda-cyhalothrin	(CAS-No.) 91465-08-6 (EC-No.) 415-130-7 (EC Index-No.) 607-252-00-6	2.5 - 10	Acute Tox. 2 (Inhalation), H330 Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Aquatic Acute 1, H400 (M=10000) Aquatic Chronic 1, H410 (M=10000)
Calcium dodecylbenzene sulphonate	(CAS-No.) 26264-06-2 (EC-No.) 247-557-8	2.5 - 10	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319
Castor oil, ethoxylated	(CAS-No.) 61791-12-6 (EC-No.) 500-151-7	2.5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3 (respiratory system), H335

Full text of H-statements: see section 16

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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Allow affected person to breathe fresh air. Allow the victim to rest. Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Repeated exposure may cause skin dryness or cracking.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER/doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: Toxic if inhaled. Danger of serious damage to health by prolonged exposure through inhalation.
Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
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6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Keep container tightly closed.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

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8.2. Exposure controls

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses

Respiratory protection:

Wear appropriate mask

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid (Emulsifiable concentrate)
Colour	: Light brown.
Odour	: Chemical odour.
Odour threshold	: No data available
pH	: 6.6
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: ± 68 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: 0.998
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
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Acute toxicity (dermal) : Harmful in contact with skin.

Acute toxicity (inhalation) : Toxic if inhaled.

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ATE (oral)	858.892 mg/kg bodyweight
ATE (dermal)	1794.1701 mg/kg
ATE (dust,mist)	0.92 mg/l/4h

lambda-cyhalothrin (91465-08-6)

LD50 oral rat	56 mg/kg
LD50 dermal rat	632 mg/kg
LC50 inhalation rat (mg/l)	0.066 mg/l/4h
Skin corrosion/irritation	: Causes skin irritation
Serious eye damage/irritation	: Causes serious eye damage
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Harmful if swallowed and in contact with skin. Toxic if inhaled.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.

Hazardous to the aquatic environment, long-term (chronic) : Very toxic to aquatic life with long lasting effects.

lambda-cyhalothrin (91465-08-6)

LC50 fish	0.00016 mg/L
EC50 Daphnia	0.00023 mg/L
ErC50 (algae)	> 1.0 mg/L

12.2. Persistence and degradability

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Persistence and degradability May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

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Bioaccumulative potential Not established.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment.

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according to GHS classification and labelling of chemicals – SANS10234 and the Regulations for Hazardous Chemical Agents - 2021.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Ecology - waste materials	: Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA
14.1. UN number		
UN 3352	UN 3352	UN 3352
14.2. UN proper shipping name		
PYRETHROID PESTICIDE, LIQUID, TOXIC	PYRETHROID PESTICIDE, LIQUID, TOXIC	PYRETHROID PESTICIDE, LIQUID, TOXIC
Transport document description		
UN 3352 PYRETHROID PESTICIDE, LIQUID, TOXIC, 6.1, III, (E), ENVIRONMENTALLY HAZARDOUS	UN 3352 PYRETHROID PESTICIDE, LIQUID, TOXIC, 6.1, III, (E), ENVIRONMENTALLY HAZARDOUS	UN 3352 PYRETHROID PESTICIDE, LIQUID, TOXIC, 6.1, III, (E), ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)		
6.1	6.1	6.1
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available		

14.6. Special precautions for user

Overland transport

Hazard identification number (Kemler No.)

: 60

Orange plates



14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulatory Information:

Relevant regulatory information regarding authorization, Safety Data Sheets, Occupational Exposure Limits, Hazardous Substances, Dangerous Goods Transport and Waste

South Africa: Occupational Health and Safety Act 1993. Regulations for Hazardous Chemical Agents - 2021. Fertilizer, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947). **Hazardous Substances Act**, 1973 (Act No.15 of 1973). Regulations for Hazardous Chemical Agents – 2021. SANS11014:2010. Safety Data Sheet for Chemical Products – Content and Order of Sections. SANS10206: 2020. The Handling, Storage and Disposal of Pesticides. National Road Traffic Act, 1996 (Act No. 93 of 1996). SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes. National Environmental Management: waste Act 59 of 2008.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources

: ECHA, Pesticide manual & Supplier SDS's.

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according to GHS classification and labelling of chemicals – SANS10234 and the Regulations for Hazardous Chemical Agents - 2021.

Other information : None.

Full text of H -statements:	
Flammable Liq. 4	Flammable Liquid, Category 4
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single Exposure
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.
H315	Causes skin irritation.
H316	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Classification and procedure used to derive the classification for mixtures according to SANS10234 and the Regulations for Hazardous Chemical Agents - 2021.:.

Flammable Liq. 4	H227	On basis of test data
Acute Tox. 4 (Oral)	H302	Calculation method
Acute Tox. 4 (Oral, Dermal)	H312	Calculation method
Acute Tox. 3 (Inhalation:dust,mist)	H331	Calculation method
Skin Irrit. 2	H316	Calculation method
Eye Dam. 1	H318	Calculation method
STOT RE. 2	H373	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	Calculation method

Safety Data Sheet (SDS), UN GHS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.