

#### Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue:

Revision date: 6/8/2016

Supersedes

Version: 3.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1,1. Product identifier

Trade name

Lambda cyhalothrin 50g/L EC

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

#### 1.2.1. Relevant identified uses

Industrial/Professional use spec Use of the substance/mixture

: For professional use only

: Agriculture insecticide

#### 1.2.2. Uses advised against

No additional information available

#### Details of the supplier of the safety data sheet

Rotam Agrochemical Company Limited

Unit 6, 26/F, Trend Centre, 29 Cheung Lee Street, Chai Wan, Hong Kong T 00852 2896 0662 - F 00852 25586577

msds@rotam.com

Emergency telephone number

Emergency number

(86) 532 8388 9090

#### SECTION 2: Hazards identification

#### Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3 H226 On basis of test data Acute toxicity (oral), Category 3 H301 On basis of test data Acute toxicity (inhalation:dust,mist) Category 4 H332 On basis of test data Hazardous to the aquatic environment — Acute Hazard, Category 1 H400 On basis of test data Hazardous to the aquatic environment — Chronic Hazard, Category 1 H410 Expert judgment Hazardous to the aquatic environment — Chronic Hazard, Category 2 H411 Expert judgment

Full text of H statements : see section 16

#### Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Toxic if swallowed, Harmful if inhaled. Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects.

#### 2.2.

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS02

GHS06

GHS09

Signal word (CLP) Hazardous ingredients

Hazard statements (CLP)

: Danger

: Lambda-cyhalothrin technical H226 - Flammable liquid and vapour

H301 - Toxic if swallowed H332 - Harmful if inhaled

H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smokina

P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment

P241 - Use explosion-proof electrical, lighting, ventilating equipment

P261 - Avoid breathing dust, mist

P264 - Wash hands thoroughly after handling

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 clothing, protective gloves

P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER

8/10/2016

EN (English)

1/9

#### Safety Data Sheet

according to Regulation (EC) No. 453/2010

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P312 - Call a POISON CENTER if you feel unwell

P321 - Specific treatment (see the instruction on this label)

P330 - Rinse mouth

P370+P378 - In case of fire: Use dry sand to extinguish

P391 - Collect spillage

P403+P235 - Store in a well-ventilated place. Keep cool

P405 - Store locked up

P501 - Dispose of contents/container according to local regulation

#### 2.3. Other hazards

No additional information available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product Identifier	g/L	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Lambda-cyhalothrin technical	(CAS No) 91465-08-6 (EC no) 415-130-7 (EC index no) 607-252-00-6	.50	Acute Tox. 3 (Oral), H301 Acute Tox. 2 (Inhalation:dust,mist), H330 Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410 (M=1000)

Full text of H-statements: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general

: Call a physician immediately.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a

doctor if you feel unwell.

First-aid measures after skin contact

: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.

First-aid measures after eye contact First-aid measures after ingestion

: Rinse eyes with water as a precaution.: Rinse mouth. Call a physician immediately.

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

No additional information available

# 4.3. Indication of any Immediate medical attention and special treatment needed

Treat symptomatically.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media

Water spray, Dry powder, Foam, Carbon dioxide.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard

fire

: Flammable liquid and vapour.

Hazardous decomposition products in case of

: Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting

: Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing

#### SECTION 6: Accidental release measures

# 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures

: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing

dust/fume/gas/mist/vapours/spray.

8/10/2016 EN (English) 2/9

#### Safety Data Sheet

according to Regulation (EC) No. 453/2010

# 6.1.2. For emergency responders

Protective equipment

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

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment

Collect spillage.

Methods for cleaning up

Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

waters.

Other information

: Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

#### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray.

, D0

Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures

Hygiene measures

: Ground/bond container and receiving equipment.

Storage conditions

: Store in a well-ventilated place, Keep cool. Keep container tightly closed. Store locked up.

#### 7.3. Specific end use(s)

No additional information available

#### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

Appropriate engineering controls

: Ensure good ventilation of the work station.

Eye protection

Hand protection

: Safety glasses

Protective gloves

Skin and body protection

: Wear suitable protective clothing

Respiratory protection

Wear respiratory protection

Environmental exposure controls

: Avoid release to the environment.

#### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state

: Liquid

Colour

: Colourless to pale yellow

Odour threshold

No data availableNo data available

nН

7.04

Relative evaporation rate (butylacetate=1)

No data availableNot applicable

Melting point
Freezing point
Boiling point

No data availableNo data available

Flash point

52 °C

Auto-ignition temperature
Decomposition temperature
Flammability (solid, gas)
Vapour pressure

Relative vapour density at 20 °C

: No data available: No data available: Not applicable: No data available

No data available

Relative density

: 0.93

8/10/2016

EN (English)

3/9

#### Safety Data Sheet

according to Regulation (EC) No. 453/2010

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

Flammable liquid and vapour.

#### 10.2. Chemical stability

Stable under normal conditions,

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Avoid contact with hot surfaces, Heat. No flames, no sparks, Eliminate all sources of ignition.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

#### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Inhalation:dust,mist: Harmful if inhaled.

Lambda cyhalothrin 50g/L EC		
LD50 oral rat	256.2 mg/kg	
LD50 dermal rat	> 2000 mg/kg	
LC50 inhalation rat (Dust/Mist - mg/l/4h)	1.2351 mg/l/4h	

Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified Respiratory or skin sensitisation Not classified Germ cell mutagenicity Not classified Carcinogenicity Not classified Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified Specific target organ toxicity (repeated : Not classified exposure)

Aspiration hazard : Not classified

#### SECTION 12: Ecological information

#### 12.1. Toxicity

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

Lambda cyhalothrin 50g/L EC		
LC50 fish 1	0.106 mg/l (96h)	
EC50 Daphnia 1	0.00005 mg/l (48h	
ErC50 (algae)	2.92 mg/l (72h)	

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

8/10/2016 EN (English) 4/9

#### Safety Data Sheet

according to Regulation (EC) No. 453/2010

### Lambda-cyhalothrin technical (91465-08-6)

Log Pow

7

#### Mobility in soil

No additional information available

#### Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

No additional information available

#### SECTION 13: Disposal consideration:

#### 13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Additional information

: Flammable vapours may accumulate in the container.

#### SECTION 14: Transport Information

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

#### 14.1. **UN number**

UN-No. (ADR) : 3351 UN-No. (IMDG) 3351 UN-No. (IATA) 3351 UN-No. (ADN) 3351 UN-No. (RID) : 3351

#### UN proper shipping name

Proper Shipping Name (ADR) : PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE Proper Shipping Name (IMDG) : PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE

Proper Shipping Name (IATA) : Pyrethroid pesticide, liquid, toxic, flammable

Proper Shipping Name (ADN) : PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE Proper Shipping Name (RID) : PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE

: UN 3351 PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE, 6.1 (3), III, (D/E), Transport document description (ADR)

**ENVIRONMENTALLY HAZARDOUS** 

Transport document description (IMDG) : UN 3351 PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE, 6.1 (3), III, MARINE

POLLUTANT/ENVIRONMENTALLY HAZARDOUS

UN 3351 Pyrethroid pesticide, liquid, toxic, flammable, 6.1 (3), III, ENVIRONMENTALLY HAZARDOÚS

Transport document description (ADN) UN 3351 PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE, 6.1 (3), III,

**ENVIRONMENTALLY HAZARDOUS** 

UN 3351 PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE, 6.1 (3), III, Transport document description (RID)

**ENVIRONMENTALLY HAZARDOUS** 

#### 14.3. Transport hazard class(es)

Transport document description (IATA)

#### ADR

Transport hazard class(es) (ADR) : 6.1 (3) Danger labels (ADR) 6.1, 3



#### IMDG

Transport hazard class(es) (IMDG) : 6.1 (3) Danger labels (IMDG) : 6.1, 3



#### Safety Data Sheet

according to Regulation (EC) No. 453/2010

#### IATA

Transport hazard class(es) (IATA) : 6.1 (3) Hazard labels (IATA)

: 6.1, 3



#### ADN

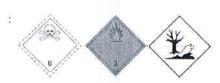
Transport hazard class(es) (ADN) : 6.1 (3) Danger labels (ADN)

: 6.1, 3



#### RID

Transport hazard class(es) (RID) 6.1 (3) Danger labels (RID) 6.1, 3



#### 14.4. Packing group

Packing group (ADR) # III Packing group (IMDG) ž III Packing group (IATA) § 10 Packing group (ADN) **111** Packing group (RID) : III

#### **Environmental hazards**

Dangerous for the environment Yes Marine pollutant Yes

Other information No supplementary information available

#### Special precautions for user

#### - Overland transport

Classification code (ADR) : TF2 Special provisions (ADR) 61, 274 Limited quantities (ADR) : 5I Excepted quantities (ADR) ; E1

Packing instructions (ADR) # P001, IBC03, R001 Mixed packing provisions (ADR)

: MP19 Portable tank and bulk container instructions ; T7

(ADR)

Portable tank and bulk container special

provisions (ADR)

: TP2, TP28

Tank code (ADR) : L4BH Tank special provisions (ADR) TU15, TE19

Vehicle for tank carriage : FL Transport category (ADR) : 2 Special provisions for carriage - Packages : V12

(ADR)

#### Safety Data Sheet

according to Regulation (EC) No. 453/2010

Special provisions for carriage - Loading, : CV13, CV28 unloading and handling (ADR)

Special provisions for carriage - Operation : S2, S9

Hazard identification number (Kemler No.) : 63

Orange plates

63 3351

: A

Tunnel restriction code (ADR) : D/E EAC code : \*3W APP code : A(fl)

#### - Transport by sea

Special provisions (IMDG) 61, 223, 274 Limited quantities (IMDG) : 5 L Excepted quantities (IMDG) : E1 Packing instructions (IMDG) P001 IBC packing instructions (IMDG) : IBC03 Tank instructions (IMDG) : T7 Tank special provisions (IMDG) : TP2, TP28 EmS-No. (Fire) F-E EmS-No. (Spillage) : S-D

Stowage and handling (IMDG) : SW2

Flash point (IMDG) 23°C to 60°C c.c.

#### - Air transport

Stowage category (IMDG)

PCA Excepted quantities (IATA) PCA Limited quantities (IATA) : Y642 PCA limited quantity max net quantity (IATA) : 2L PCA packing instructions (IATA) : 655 PCA max net quantity (IATA) : 60L CAO packing instructions (IATA) : 663 CAO max net quantity (IATA) : 220L Special provisions (IATA) : A3, A4 ERG code (IATA) : 6F

#### - Inland waterway transport

Classification code (ADN) TF2 Special provisions (ADN) \$ 61, 274, 802 Limited quantities (ADN) 🥫 5 L

Excepted quantities (ADN) # E1

Equipment required (ADN) PP, EP, EX, TOX, A Ventilation (ADN) # VE01, VE02

Number of blue cones/lights (ADN) ; 0

#### - Rail transport

Classification code (RID) : TF2 Special provisions (RID) 61, 274 Limited quantities (RID) 5L Excepted quantities (RID) ∄ E1

Packing instructions (RID) ® P001, IBC03, R001

Mixed packing provisions (RID) MP19 Portable tank and bulk container instructions

(RID)

Portable tank and bulk container special TP2, TP28

provisions (RID)

Tank codes for RID tanks (RID) : L4BH Special provisions for RID tanks (RID) : TU15 Transport category (RID) : 2

8/10/2016 EN (English)

7/9

#### Safety Data Sheet

according to Regulation (EC) No. 453/2010

Special provisions for carriage - Packages

(RID)

Special provisions for carriage - Loading,

unloading and handling (RID)

: CW13, CW28, CW31

Colis express (express parcels) (RID)

: CE8, CE12

Hazard identification number (RID)

63

: W12

Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

#### SECTION 15: Regulatory information

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

#### 15.1.1. **EU-Regulations**

Contains no substances with Annex XVII restrictions Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

#### 15.1.2. National regulations

#### Germany

VwVwS Annex reference

: Water hazard class (WGK) 3, severe hazard to waters (Classification according to VwVwS,

12th Ordinance Implementing the Federal Immission Control Act - 12, BlmSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

#### Netherlands

SZW-lijst van kankerverwekkende stoffen

SZW-lijst van mutagene stoffen

: None of the components are listed

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Borstvoeding

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting

: None of the components are listed

: None of the components are listed

: None of the components are listed

giftige stoffen - Ontwikkeling

: None of the components are listed

#### Denmark

Class for fire hazard

Store unit

: Class II-1 : 5 liter

Classification remarks

R10 <H226;H301;H332;H410>; Emergency management guidelines for the storage of

flammable liquids must be followed

Recommendations Danish Regulation

: Young people below the age of 18 years are not allowed to use the product

#### Chemical safety assessment

No chemical safety assessment has been carried out

# SECTION 16: Other information

### Full text of H- and EUH-statements:

Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2		
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3		
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1		
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		
H226	Flammable liquid and vapour		
H301	Toxic if swallowed		
H319	Causes serious eye irritation		
H330	Fatal if inhaled		
H332	Harmful if inhaled		
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		

# Lambda cyhalothrin 50g/L EC Safety Data Sheet

according to Regulation (EC) No. 453/2010

SDS EU (REACH Annex II)

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