



OBULUS 5 EC

(Lambda cyhalothrin 50 g/L)
Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue:

Revision date: 6/8/2020

Supersedes:

Version: 3.0

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

1.1. Product identifier

Trade name : OBULUS 5 EC (Lambda cyhalothrin 50 g/L)

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only
Use of the substance/mixture : Agriculture insecticide

1.2.2. Uses advised against

No additional information available

1.3. 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

MANUFACTURER AND FORMULATOR:

JIANGSU ROTAM CHEMISTRY, CO., LTD.
N° 88 Rotam Road, ETDZ, Kunshan 215301, Jiangsu. China.
TEL: 0512 – 5771 – 1988 FAX: 0512 – 5771 – 8697

1.4. Emergency telephone number

Emergency number : (86) 532 8388 9090

SECTION 2: Hazards identification

2.1. 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. Label elements

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

Hazard pictograms (CLP) :



GHS02

GHS06

GHS09

Signal word (CLP) :

Danger

Hazardous ingredients :

Lambda-cyhalothrin technical

Hazard statements (CLP) :

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 smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment

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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
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 : Rinse eyes with water as a precaution.
First-aid measures after ingestion : 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 : Flammable liquid and vapour.
Hazardous decomposition products in case of fire : 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.

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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.

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.

Hygiene measures : 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 : 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.

Hand protection : Protective gloves

Eye protection : Safety glasses

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 : No data available

Odour threshold : No data available

pH : 7.04

Relative evaporation rate (butylacetate=1) : No data available

Melting point : Not applicable

Freezing point : No data available

Boiling point : No data available

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Flash point	: 52 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 0.93
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.

OBULUS 5 EC (Lambda cyhalothrin 50 g/L)	
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 exposure)	: Not classified
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.

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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

Lambda-cyhalothrin technical (91465-08-6)	
Log Pow	7

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

No additional information available

SECTION 13: Disposal considerations

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

14.2. 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
Transport document description (ADR) : UN 3351 PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE, 6.1 (3), III, (D/E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG) : UN 3351 PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE, 6.1 (3), III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA) : UN 3351 Pyrethroid pesticide, liquid, toxic, flammable, 6.1 (3), III, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN) : UN 3351 PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE, 6.1 (3), III, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID) : UN 3351 PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE, 6.1 (3), III, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

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



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IMDG

Transport hazard class(es) (IMDG) : 6.1 (3)

Danger labels (IMDG) : 6.1, 3



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) : III

Packing group (IATA) : III

Packing group (ADN) : III

Packing group (RID) : III

14.5. Environmental hazards

Dangerous for the environment : Yes

Marine pollutant : Yes

Other information : No supplementary information available

14.6. 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

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Portable tank and bulk container instructions (ADR)	: T7
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 (ADR)	: V12
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13, CV28
Special provisions for carriage - Operation (ADR)	: S2, S9
Hazard identification number (Kemler No.)	: 63
Orange plates	:



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 category (IMDG)	: A
Stowage and handling (IMDG)	: SW2
Flash point (IMDG)	: 23°C to 60°C c.c.

- Air transport

PCA Excepted quantities (IATA)	: E1
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

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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)	: T7
Portable tank and bulk container special provisions (RID)	: TP2, TP28
Tank codes for RID tanks (RID)	: L4BH
Special provisions for RID tanks (RID)	: TU15
Transport category (RID)	: 2
Special provisions for carriage – Packages (RID)	: W12
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW28, CW31
Colis express (express parcels) (RID)	: CE8, CE12
Hazard identification number (RID)	: 63

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

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, Annex 4)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

Denmark

Class for fire hazard : Class II-1

Store unit : 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

15.2. 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

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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

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