



Safety Data Sheet dated 9/1/2015, version 1

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

### 1.1. Product identifier

Trade name: **PERBIO CHOC RTU**

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

Recommended use:

Insecticide - Biocidal use

Uses advised against:

Do not use for purposes other than those stated in "Recommended uses"

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

Company:

LODI UK

Pensnett Trading Estate 3rd Avenue

West Midlands

DY6 7FD KINGSWINFORD United Kingdom

Tel. 00 44 1628 779 027

Competent person responsible for the safety data sheet:

[fds@lodi.fr](mailto:fds@lodi.fr)

### 1.4. Emergency telephone number

NPIS (National Poison Centre) - Birmingham Unit

[To be called by medical staff or physicians]

City Hospital, Birmingham, B18 7QH, UK

Tel: 0844 892 011

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols:

Xn Harmful


N Dangerous for the environment

R Phrases:


R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

EC regulation criteria 1272/2008 (CLP)

 Danger, Asp. Tox. 1, May be fatal if swallowed and enters airways.

 Warning, Aquatic Acute 1, Very toxic to aquatic life.

 Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

### 2.2. Label elements

Symbols:



Danger

Hazard statements:

H304 May be fatal if swallowed and enters airways.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P273 Avoid release to the environment.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/...

P331 Do NOT induce vomiting.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contents

Hydrocarbures, C11-C14, n-alcanes, isoalcanes, cycliques, <2% aromatiques

Permethrin: May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

### 2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

---

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

This SDS concerns a mixture, see 3.2.


### 3.2. Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

40 g/L Piperonyl butoxide

CAS: 51-03-6, EC: 200-076-7


N; R50/53

 4.1/C1 Aquatic Chronic 1 H410

5 g/L Tetraméthrine

CAS: 7696-12-0, EC: 231-711-6

N; R50/53

 4.1/A1 Aquatic Acute 1 H400






 4.1/C1 Aquatic Chronic 1 H410

5 g/L Permethrin


Index number: 613-058-00-2, CAS: 52645-53-1, EC: 258-067-9

Xn,Xi,N; R20/22-43-50/53

## Safety Data Sheet PERBIO CHOC RTU

-  3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317
-  4.1/A1 Aquatic Acute 1 H400
-  4.1/C1 Aquatic Chronic 1 H410
-  3.1/4/Oral Acute Tox. 4 H302
-  3.1/4/Inhal Acute Tox. 4 H332

> 10% Hydrocarbures, C11-C14, n-alcanes, isoalcanes, cycliques, <2% aromatiques  
REACH No.: 01-2119456620-43, CAS: 64742-47-8, EC: 926-141-6  
Xn; R65-66

-  3.10/1 Asp. Tox. 1 H304

---

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

---

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

Extinguishing media which must not be used for safety reasons:

None in particular.

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

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

#### 5.3. Advice for firefighters

## Safety Data Sheet

### PERBIO CHOC RTU

Use suitable breathing apparatus .  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Move undamaged containers from immediate hazard area if it can be done safely.

---

#### SECTION 6: Accidental release measures

##### 6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.  
Remove persons to safety.  
See protective measures under point 7 and 8.

##### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.  
Retain contaminated washing water and dispose it.  
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.  
Suitable material for taking up: absorbing material, organic, sand.

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

Rapidly recover the product. To do so, wear a mask and protective clothing.  
Wash with plenty of water.

##### 6.4. Reference to other sections

See also section 8 and 13

---

#### SECTION 7: Handling and storage

##### 7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.  
Don't use empty container before they have been cleaned.  
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.  
Contaminated clothing should be changed before entering eating areas.  
Do not eat or drink while working.  
See also section 8 for recommended protective equipment.

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

Keep in a dry and cool place.  
Store in original container, tightly closed  
Keep out of reach of children  
Keep away from food and drink and animal feeding stuffs  
Keep away from food, drink and feed.  
Incompatible materials:  
None in particular.  
Instructions as regards storage premises:  
Adequately ventilated premises.

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

None in particular

---

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

##### 8.1. Control parameters

No occupational exposure limit available  
DNEL Exposure Limit Values  
N.A.

PNEC Exposure Limit Values  
N.A.

### 8.2. Exposure controls

Eye protection:  
Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:  
Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:  
Wear gloves  
Wash hands after handling.

Respiratory protection:  
Use adequate protective respiratory equipment.

Thermal Hazards:  
None

Environmental exposure controls:  
None

## SECTION 9: Physical and chemical properties

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

Appearance and colour:	liquid slightly yellow
Odour:	N.A.
Odour threshold:	N.A.
pH:	N.A.
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	>62 ° C
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	0.819
Solubility in water:	partial
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	N.A.
Explosive properties:	N.A.
Oxidizing properties:	N.A.

### 9.2. Other information

Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties	N.A.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under normal conditions.

**10.2. Chemical stability**

Stable under normal conditions

**10.3. Possibility of hazardous reactions**

None

**10.4. Conditions to avoid**

Stable under normal conditions.

**10.5. Incompatible materials**

None in particular.

**10.6. Hazardous decomposition products**

None.

---

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

Permethrin - CAS: 52645-53-1

a) acute toxicity:

Test: LD50 - Route: oral - Species: Rat : > 2000 mg/Kg

Test: LD50 - Route: dermal - Species: Rat : > 2000 mg/Kg

Test: LC50 - Route: Inhalation - Species: Rat : > 0.45 mg/L

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

---

**SECTION 12: Ecological information**

**12.1. Toxicity**

Adopt good working practices, so that the product is not released into the environment. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Tetraméthrine - CAS: 7696-12-0

a) Aquatic acute toxicity:

Endpoint: LC50 Fish = 0.0037 mg/L - Duration h: 96

Endpoint: EC50 Daphnia magna = 0.110 mg/L - Duration h: 48

Permethrin - CAS: 52645-53-1

a) Aquatic acute toxicity:

Endpoint: LC50 Fish = 0.0089 mg/L - Duration h: 96

Endpoint: LC50 Daphnia = 0.020 mg/L - Duration h: 24

## Safety Data Sheet PERBIO CHOC RTU

Endpoint: EC50 Algae > 0.011 mg/L - Duration h: 72

### 12.2. Persistence and degradability

N.A.

### 12.3. Bioaccumulative potential

N.A.

### 12.4. Mobility in soil

N.A.

### 12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

### 12.6. Other adverse effects

None

---

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

---

## SECTION 14: Transport information

### 14.1. UN number

ADR-UN number: 3082

### 14.2. UN proper shipping name

ADR-Shipping Name: UN 3082 Environmentally hazardous substance, liquid, nos (permethrin), 9, III (E)

### 14.3. Transport hazard class(es)

ADR-Class: 9

### 14.4. Packing group

ADR-Packing Group: III

### 14.5. Environmental hazards

Marine pollutant: Marine pollutant  
Most important toxic component: Permethrin

### 14.6. Special precautions for user

ADR-Tunnel Restriction Code: E

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

---

## SECTION 15: Regulatory information

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

Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances)  
Dir. 99/45/EC (Classification, packaging and labelling of dangerous preparations)  
Dir. 98/24/EC (Risks related to chemical agents at work)  
Dir. 2000/39/EC (Occupational exposure limit values)  
Dir. 2006/8/EC

## Safety Data Sheet PERBIO CHOC RTU

Regulation (EC) n. 1907/2006 (REACH)  
Regulation (EC) n. 1272/2008 (CLP)  
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013  
Regulation (EU) n. 453/2010 (Annex I)  
Regulation (EU) n. 286/2011 (ATP 2 CLP)  
Regulation (EU) n. 618/2012 (ATP 3 CLP)  
Regulation (EU) n. 487/2013 (ATP 4 CLP)

Restrictions related to the product or the substances contained according to Annex XVII  
Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II):

N.A.

### 15.2. Chemical safety assessment

No

---

### SECTION 16: Other information

Full text of phrases referred to in Section 3:

R20/22 Harmful by inhalation and if swallowed.

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

H304 May be fatal if swallowed and enters airways.

H410 Very toxic to aquatic life with long lasting effects.

H400 Very toxic to aquatic life.

H317 May cause an allergic skin reaction.

H302 Harmful if swallowed.

H332 Harmful if inhaled.

This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,  
Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van  
Nostrand Reinold

CCNL - Appendix 1

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of



## Safety Data Sheet PERBIO CHOC RTU

	Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
CSR:	Chemical safety report
DNEL:	Derived No Effect Level.
EC50:	
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
N.A.:	Not available
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
UN:	United Nations
WGK:	German Water Hazard Class.