





Safety Data Sheet dated 28/01/2014, 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 - Phytosanitary 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 Group - Parc d'Activités des Quatre Routes 35390 Grand Fougeray - France Tel 0033 (0) 2.99.08.48.59

Competent person responsible for the safety data sheet:

regulatory@lodi.fr

1.4. Emergency telephone number

NPIS 0121 5078 4123 BIRMINGHAM CENTRE BNPC 00 33 3 83 32 36 36 NANCY FRANCE

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)

The mixture is not classified as dangerous according to EC Regulation 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements







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.

S Phrases:

S23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

S35: This material and its container must be disposed of in a safe way.

S51: Use only in well-ventilated areas.

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Contents

Hydrocarbures, C11-C14, n-alcanes, isoalcanes, cycliques, <2% aromatiques Permethrin, May produce an allergic reaction

Precautionary statements:

None

Special Provisions:

None

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

N.A.

3.2. Mixtures

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

>50% 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

40g/L Piperonyl butoxide

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

N; R50/53

4.1/C1 Aquatic Chronic 1 H410



0.63% Tetramathrine

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

0.64% permethrin (ISO); m-phenoxybenzyl

3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

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

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

(1) 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

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Remove contaminated clothing immediately.

Rinse immediately with plenty of water and possibly with soap parts

body having been in contact with the product, even if in doubt.

Seek medical attention if ill effect or irritation develops

Thoroughly wash with soap and water

In case of eyes contact:

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

Rinse immediately with plenty of water

Seek medical attention if ill effect or irritation develops

In case of Ingestion:

Rinse mouth Call a physician

Do not induce vomiting

In case of Inhalation:

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

Assure fresh air breathing

Seek medical advice



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

Ingestion: may cause lung damage if swallowed (chemical pneumonia due to aspiration into the lungs during swallowing)

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

Treatment:

Consult a physician and show the label

Do not induce vomiting

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

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

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

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.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recomened 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 away from heat and direct sunlight.

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)

Insecticide

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:

Avoid contact with skin and hands

Wear gloves

Respiratory protection:

Wear appropriate respiratory apparatus

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: Slight

Odour threshold: Not Relevant



pH: Not Relevant

Melting point / freezing point:

Not Relevant
Not Relevant
Not Relevant

Solid/gas flammability: N.A. Upper/lower flammability or explosive limits: N.A. Vapour density: N.A. >62°C Flash point: Evaporation rate: N.A. Vapour pressure: N.A. Relative density: 0.819 Solubility in water: Partial Solubility in oil: N.A. N.A. Partition coefficient (n-octanol/water): Auto-ignition temperature: N.A. Decomposition temperature: N.A. Viscosity: N.A.

Explosive properties: Not Relevant Oxidizing properties: Not Relevant

9.2. Other information

Miscibility: Partial Fat Solubility: N.A. Conductivity: N.A.

Substance Groups relevant properties Not Relevant

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:

PERBIO CHOC RTU

a) acute toxicity:



Test: LD50 - Route: oral - Species: Rat : > 430mg/Kg - Notes: / On Permethrin Test: LD50 - Route: oral - Species: Rat : > 5000 mg/Kg - Notes: / On Tetramethrin

Toxicological information of the main substances found in the mixture:

N.A.

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.

Pyrethrins 20g/L PBO 160g/ ULV

a) Aquatic acute toxicity:

Endpoint: EC50 Daphnia = 0.0006 mg/L - Duration h: 48 - Notes: On Permethrin Endpoint: EC50 Fish = 0.0037 mg/L - Duration h: 96 - Notes: On Tetramethrin

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 IATA-Un number: 3082 IMDG-Un number: 3082

14.2. UN proper shipping name

ADR-Shipping Name: UN3082 MATIÈRE DANGEREUSE DU POINT DE VUE DE L'ENVIRONNEMENT, LIQUIDE, N.S.A., (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:

14.6. Special precautions for user

Read label before use

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

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP)

Regulation (EU) n. 453/2010 (Annex I)

Regulation (EU) n. 286/2011 (ATP 2 CLP)

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

Restriction 3

Where applicable, refer to the following regulatory provisions:

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

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



1999/13/EC (VOC directive)

15.2. Chemical safety assessment

Nο

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 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

Insert further consulted bibliography

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

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.

N.A.: N.A.

N.D.: