

Safety Data Sheet

D.K. Veterinary



Safety Data Sheet dated 24/2/2015, version 1

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

1.1. Product identifier

Mixture identification:
Trade name: D.K. Veterinary

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

Recommended use:
Insecticide for professional and non professional user
Uses advised against:
All uses not listed in the Recommended uses

1.3. Details of the supplier of the safety data sheet

Company:
VEBI Istituto Biochimico Srl
Via Desman, 43 - 35010 Borgoricco (PD) - Italy

Competent person responsible for the safety data sheet:
info@vebi.it

1.4. Emergency telephone number

Antipoison Center - Hospital Name 1 - City - Telephone nbr. (availability information)

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:


N Dangerous for the environment

R Phrases:

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

EC regulation criteria 1272/2008 (CLP)

 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:



Warning

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Hazard statements:

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P273 Avoid release to the environment.

P391 Collect spillage.

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

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:

>= 10% - < 12.5% Piperonyl Butoxide

REACH No.: 01-2119537431-46-0000, CAS: 51-03-6, EC: 200-076-7

N; R50/53

 4.1/A1 Aquatic Acute 1 H400

 4.1/C1 Aquatic Chronic 1 H410

>= 10% - < 12.5% Cypermethrin

Index number: 607-421-00-4, CAS: 52315-07-8, EC: 257-842-9

Xn, Xi, N; R20/22-37-50/53

 3.8/3 STOT SE 3 H335

 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

>= 1% - < 3% Tetramethrin

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

N; R50/53

 4.1/C1 Aquatic Chronic 1 H410

 4.1/A1 Aquatic Acute 1 H400

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>= 1% - < 3% alkoxyated

R52/53
4.1/C3 Aquatic Chronic 3 H412

>= 0.1% - < 0.25% bronopol (INN); 2-bromo-2-nitropropane-1,3-diol
Index number: 603-085-00-8, CAS: 52-51-7, EC: 200-143-0
Xn,Xi,N; R21/22-37/38-41-50

3.8/3 STOT SE 3 H335

3.2/2 Skin Irrit. 2 H315

3.3/1 Eye Dam. 1 H318

4.1/A1 Aquatic Acute 1 H400

3.1/4/Oral Acute Tox. 4 H302

3.1/4/Dermal Acute Tox. 4 H312

900 ppm acetic acid ...%

Index number: 607-002-00-6, CAS: 64-19-7, EC: 200-580-7
C; R10-35

2.6/3 Flam. Liq. 3 H226

3.2/1A Skin Corr. 1A H314

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and 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 under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

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

Treatment:

None

SECTION 5: Firefighting measures

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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

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

Avoid temperatures > 40°C

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

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

acetic acid ...% - CAS: 64-19-7

- OEL Type: EU - LTE(8h): 25 mg/m³, 10 ppm

- OEL Type: ACGIH, 10 ppm, 15 ppm - Notes: URT and eye irr, pulm func

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:

No special precaution must be adopted for normal use.

Protection for hands:

Suitable gloves type:

Respiratory protection:

Not needed for normal use.

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: opalescent liquid

Odour threshold: Not Relevant

pH: 5.0

Melting point / freezing point: Not Relevant

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: >100 °C ° C

Evaporation rate: N.A.

Vapour pressure: N.A.

Relative density: 1.0- 1.1 mg/ml

Solubility in water: disperdibile

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: Not Relevant

Decomposition temperature: Not Relevant

Viscosity: 500-1000 c

Explosive properties: Not Relevant

Oxidizing properties: Not Relevant

9.2. Other information

Miscibility: Not Relevant

Fat Solubility: Not Relevant

Conductivity: Not Relevant

Not Relevant

SECTION 10: Stability and reactivity

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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:

Piperonyl Butoxide - CAS: 51-03-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 4570 mg/kg - Source: male

Test: LD50 - Route: Oral - Species: Rat = 7220 mg/kg - Source: female

Test: LD50 - Route: Skin - Species: Rabbit = 2000 mg/kg

Test: LC50 - Route: Inhalation Vapour - Species: Rat > 5.9 mg/l - Duration: 4h

b) skin corrosion/irritation:

Test: Eye Corrosive Negative

Test: Skin Corrosive Negative

Test: Skin Corrosive Negative

d) respiratory or skin sensitisation:

Test: Skin Sensitization Negative

f) carcinogenicity:

Test: Genotoxicity Negative

g) reproductive toxicity:

Test: Reproductive Toxicity Negative

Cypermethrin - CAS: 52315-07-8

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 500 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat = 3.28 mg/l - Duration: 4h

Tetramethrin - CAS: 7696-12-0

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 5.63 mg/l - Duration: 4h

b) skin corrosion/irritation:

Test: Eye Corrosive Negative

Test: Skin Corrosive Negative

Test: Skin Irritant Negative

Test: Eye Irritant Negative

d) respiratory or skin sensitisation:

Test: Skin Sensitization Negative

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- f) carcinogenicity:
Test: Mutagenesis Negative
- g) reproductive toxicity:
Test: Reproductive Toxicity Negative
- bronopol (INN); 2-bromo-2-nitropropane-1,3-diol - CAS: 52-51-7
- a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 307 mg/kg
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat > 0.588 mg/l - Duration: 4h
- b) skin corrosion/irritation:
Test: Eye Irritant Positive
Test: Skin Corrosive Positive
- e) germ cell mutagenicity:
Test: Mutagenesis Negative
- f) carcinogenicity:
Test: Carcinogenicity Negative
- g) reproductive toxicity:
Test: Reproductive Toxicity Negative

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.

Piperonyl Butoxide - CAS: 51-03-6

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 3.94 mg/l - Duration h: 96 - Notes: Cyprinodon variegatus

Endpoint: EC50 - Species: Daphnia = 0.51 mg/l - Duration h: 48 - Notes: Daphnia magna

e) Plant toxicity:

Endpoint: EC50 - Species: Algae = 2.09 mg/l - Duration h: 72 - Notes: Selenastrum capricornutum

Cypermethrin - CAS: 52315-07-8

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 0.0028 mg/l - Duration h: 96 - Notes: Salmo gairdneri

Endpoint: EC50 - Species: Daphnia = 0.0003 mg/l - Duration h: 48 - Notes: Daphnia magna

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- Endpoint: EC50 - Species: Algae > 0.1 mg/l - Duration h: 96 - Notes: Selenastrum capricornutum
- b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Fish > 0.00003 mg/l - Notes: 34 d Pimephales promelas
Tetramethrin - CAS: 7696-12-0
- a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 0.033 mg/l - Duration h: 96 - Notes: Brachydanio rerio
Endpoint: EC50 - Species: Daphnia = 0.47 mg/l - Duration h: 48 - Notes: Daphia magna
- e) Plant toxicity:
Endpoint: EC50 - Species: Algae = 1.36 mg/l - Duration h: 72 - Notes: Scenedesmus subspicatus
bronopol (INN); 2-bromo-2-nitropropane-1,3-diol - CAS: 52-51-7
- a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Daphnia = 1.4 mg/l - Duration h: 48 - Notes: Daphnia magna
Endpoint: EC50 - Species: Algae = 0.4-2.8 mg/l - Duration h: 72 - Notes: Algae
Endpoint: LC50 - Species: Fish = 42.2 mg/l - Duration h: 96 - Notes: Oncorhynchus mykiss
- f) Effects in sewage plants:
Endpoint: EC50 > 50 mg/l - Notes: Bacteria

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. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

ADR-UN number: UN 3082
IATA-Un number: UN 3082
IMDG-Un number: UN 3082

14.2. UN proper shipping name

ADR-Shipping Name: dangerous substance for the environment, liquid, nos (piperonyl butoxide, pyrethroids)
IATA-Technical name: dangerous substance for the environment, liquid, nos (piperonyl butoxide, pyrethroids)
IMDG-Technical name: dangerous substance for the environment, liquid, nos (piperonyl butoxide, pyrethroids)

14.3. Transport hazard class(es)

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ADR-Class: 9
ADR-Label: 9
ADR - Hazard identification number: 9
IATA-Class: 9
IATA-Label: 9
IMDG-Class: 9

14.4. Packing group

ADR-Packing Group: III
IATA-Packing group: III
IMDG-Packing group: III

14.5. Environmental hazards

Marine pollutant: Marine pollutant
Most important toxic component:

14.6. Special precautions for user

ADR-Tunnel Restriction Code: (E)
Rail (RID): 9
IATA-Passenger Aircraft: 964
IATA-Cargo Aircraft: 964
IMDG-Technical name: dangerous substance for the environment, liquid, nos
(piperonyl butoxide, pyrethroids)
IMDG-EMS: F-A, S-F

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

Non applicable

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) 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)
Regulation (EU) n. 944/2013 (ATP 5 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

Restriction 40

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)

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

N.A.

WGK Classification (Water hazard class)

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of phrases referred to in Section 3:

R10 Flammable.

R20/22 Harmful by inhalation and if swallowed.

R21/22 Harmful in contact with skin and if swallowed.

R35 Causes severe burns.

R37 Irritating to respiratory system.

R37/38 Irritating to respiratory system and skin.

R41 Risk of serious damage to eyes.

R50 Very toxic to aquatic organisms.

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

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H335 May cause respiratory irritation.

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H412 Harmful to aquatic life with long lasting effects.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H312 Harmful in contact with skin.

H226 Flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

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.

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DNEL:	Derived No Effect Level.
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.
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).
WGK:	German Water Hazard Class.