

MATERIAL SAFETY DATA SHEET

February 2015 Rev. 03

1 Identification of the substance/preparation and of the company/undertaking/

1.1 – Product details

Trade name: Vaposect Insect Spray

Registration number for BAuA: N - 62789

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

Insecticide aerosol based on Pyrethrum to domestic and civil use.

Not applicable in other uses than the uses identified.

1.3 – Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Vaposect.com

Valkenswaardstraat 155, 5036 SK Tilburg, The Netherlands

Tel.+31 (0)13 26 000 62 - E-mail : info@vaposect.com

Qualified technician on drafting the MSDS: info@vaposect.com

1.4 – Emergency telephone number:

Tel.+31 (0)13 26 000 62 VAPOSECT, office hours)

For urgent information, call a **Poison Centre** opened 24 hours a day.

België/Belgium/Luxemburg	Antigifcentrum Brussel	+32 22 64 96 36
Denemarken/Denmark	Giftlinjen	+45 82 12 12 12
Duitsland/Germany	Vergiftungs -Informations- Zentrale	+49 30 450 653565
Engeland(U.K.)	Anti -Poisoncenter	+44 87 060 06266
Frankrijk/France	INRS/ORFILA	+33 14 542 5959
Hongarije/Hungary	Health Toxicological Information Service	+36 80 201 199
Italië/Italy	Centro Antiveleni Ospedale Niguarda, Milano	+39 26 610 1029
Nederland/The Netherlands	NVIC Utrecht	+31 30 274 8888
Oostenrijk/Austria	Vergiftungsinformationszentrale	+43 14 06 43 43
Spanje/Spain	Instituto Nacional de Toxicologia	+34 15 620 420
Zweden/Sweden	Giftinformationscentralen	+46 8 33 12 31
Zwitserland/Switzerland	Swiss Toxicological Information Centre	+41 44 251 5151

Classification according the CLP Regulation N. 1272/2008 and subsequent modifications and adjustments

Flam. Aerosol 1, H222

Aquatic Chronic 1, H410

2.2 – Label elements

Hazard labelling of the preparation according to the directives 67/548/EEC and 1999/45/EC and subsequent modifications and adjustments.

Danger symbols:

Hazard labelling of the preparation according to CLP Regulation N. 1272/2008 and subsequent modifications and adjustments



F+ Extremely flammable



N Dangerous for the

environment

Risk phrases (R)

12 – Extremely flammable

50/53 – Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

67 - Vapours may cause drowsiness and dizziness.

Safety phrases (S)

2 – Keep out of the reach of children.

3/7 – Keep container tightly closed in a cool place.

16 – Keep away from sources of ignition - No smoking.

23 – Do not breathe aerosols.

24/25 – Avoid any inhalation, contact with skin and eyes. Wear suitable protective clothing and gloves.

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

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- 29 – Do not empty into drains.
- 33 – Take precautionary measures against static discharges.
- 61 – Avoid release to the environment. Refer to special instructions/safety data sheet.

Additional classification: Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Do not spray on food. Do not contaminate with direct (spray) food, drink and containers used to contain them. Keep the container out of the reach of children. Keep away from any sources of ignition.



Hazard statements (H):

- H222: Extremely flammable aerosol
- H229: Pressurized container: may burst if heated
- H319: Causes serious eye irritation
- H336: May cause drowsiness or dizziness
- H410: Very toxic to aquatic life with long lasting effects

Precautionary statements (P):

- 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.
- P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
- P211: Do not spray on an open flame or other ignition source.
- P251: Pressurized container: Do not pierce or burn, even after use.
- P270: Do not eat, drink or smoke when using this product.
- P273: Avoid release to the environment.
- P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50°C.

2.3 – Other hazards
Not available information.

3. Composition/information on ingredients

3.1 – Substances: Not pertinent information.

3.2 – Mixture: It contains

CHEMICAL NAME	CONC.	CLASSIFICATION 67/548/CEE	CLASSIFICATION 1272/2008 (CLP)
PYRETHRUM EXTRACT 25% EINECS 232-319-8 CAS 8003-34-7	7,00%	Xn, R20/21/22 N R50/53	Acute Tox. 4, H302, H312; H332 Aquatic Acute 1 H400 Aquatic Chronic 1 H410

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PIPERONYL BUTOXIDE 94% EINECS 200-076-7 CAS 51-03-6	16,00%	N R50/53	Aquatic Acute 1 H400 Aquatic Chronic 1 H410
2-PROPANOL EINECS 200-661-7 CAS 67-63-0	11,50%	Xi, F R67, F R11, R36	Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336
PROPANE EINECS 200-827-9 CAS 74-98-6	32,75%	F+ R12	Flam. Gas 1 H220 Nota U
BUTANE EINECS 203-448-7 CAS 106-97-8	32, 75%	F+ R12	Flam. Gas 1 H220 Nota U

T+ = Extremely Toxic (T+), T = Toxic (T), Xn = Harmful (Xn), C = Corrosive (C), Xi = Irritant (Xi), O = Oxidant (O), E = Explosive (E), F+ = Extremely Flammable (F+), F = Flammable (F), N = Environmentally hazardous (N).

The full text of Risk phrases (R) and Hazards (H) is specified in section 16.

Application of Note C, H, P, U (Enclosed 1 of the 67/548/EEC Directive and/or VI EC 1272/2008 Regulation). See section 16.

4 First-aid measures

4.1 – Description of first-aid measures

General information: if symptoms persist, seek medical care, giving the information contained in the label and in this sheet. In case of accident, the first-aid measure should be performed by trained personnel, in order to avoid the injured further complication or damages.

After eye contact: Rinse opened eye with water for several minutes and get medical advice.

After skin contact: Immediately wash with plentiful running water.

After inhalation: remove the patient to fresh air; consult get medical advice if necessary.

After swallowing: get medical advice, showing the safety sheet. Do not induce vomiting.

4.2 – Main symptoms and effects, both acute and retarded

For symptoms and effects caused by the substances see section 11. Symptoms of poisoning may even occur after several hours, therefore medical observation for at least 48 hours after the accident may be necessary.

4.3 – Indications about the possible need to get medical advice and special treatments

Symptomatic treatment and control of vital functions.

5 Fire-fighting measures

5.1 – Extinguishing agents:

Suitable extinguishing agents: CO₂, dry chemical extinguisher, sand.

Unsuitable extinguishing agents: Water with full jet. Water is not effective for fire -extinguishing, however it can be used to cool down containers exposed to flames, in order to prevent bursts and explosions.

5.2 – Special hazards arising from the substance or mixture

Particular fire dangers: In case of fire, toxic gas and irritating vapours emission.

5.3 – Advice for firefighters

Protective equipment: Wear suitable rebreather (especially in indoor locals) and complete protection outfit.

Special procedures: Contain the spread. Stay upwind. Avoid to breathe vapours. Cool down the containers exposed to fire with nebulized water. Avoid extinguishing water to release to the environment.

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6 Accidental release measures**6.1 – Personal precautions, protective equipment and emergency procedures**

Use suitable personal protective equipment (see section 8). Ensure adequate ventilation.

6.2 Environmental precautions

Keep the product away from sewers, fluvial and marine water to avoid environmental pollution (in that case, inform respective authorities).

6.3 – Methods and material for containment and cleaning up

In case of spreading on the ground, stem with sand or soil and collect with absorbing material. Dispose the collected material in disposal container (see Section 13).

6.4 – Reference to other sections

Further information regarding individual protection and disposal are reported in section 8 and 13.

7 Handling and storage**7.1 - Precautions for safe handling**

Ensure good ventilation. Avoid eating, drinking and smoking. Use suitable protective clothes (see Section 8). Wash with water and soap after handling; ensure good ventilation of the workplace. Do not smoke and do not use on naked flame. Do not spray onto a naked flame or any incandescent material. Keep ignition sources away – Do not smoke. Protect against electrostatic charges. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C, for example incandescent lamps. Do not pierce or burn. Even after use.

7.2 - Conditions for safe storage, including any incompatibilities

Store in the original tightly sealed receptacle, away from food and beverages and away from the reach of children and domestic animals. Store in a cool location. Protect from direct sunlight. Where applicable, observe official regulations on storing packaging with pressurized containers.

7.3 - Specific end use(s)

No further relevant information available.

8 Exposure controls/personal protection**8.1 – Control parameters**

Pyrethrum (cleansed from sensitizing lactone): 1 mg/m³ (TLV-TWA). Ref. D. 81/2008, Enclosed XXXVIII

Pyrethrin: 5 mg/m³ (TLV-TWA). Ref. ACGIH (see section 16)

2-propanol: 491 mg/m³ (TLV-TWA, skin). Ref. ACGIH (see section 16)

2-propanol: 892 ml/m³ (TLV-STEL, skin). Ref. ACGIH (see section 16)

Alkanes C1-C4 (Propane and Butane): 1000 ppm. Ref. ACGIH (see section 16)

8.2 – Exposure controls

General protective measures: Use the preparation according the indication contained in this safety sheet. Use individual protective devices recommended in this section.

Respiratory protection: In not so ventilated environments, where high percentage of product could be present, protect adequately the respiratory tract (mask with suitable filter against gas and solvents).

Protection of hands: Use impermeable and chemical substances resistant gloves (EN 374).

Eye protection: Use safety glasses with side protection, in case of possible contact to eyes.

Body protection: If need use protective coats.

9 Physical and chemical properties**9.1 - Information on basic physical and chemical properties**

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Form:	aerosol
Color:	pale yellow
Odor:	characteristic
Boiling Temperature	-41°C
Ignition point	14°C
Ignition temperature	425°C
Explosion hazard	Non-explosive product
Flammability limits	
- lower	1.8 vol%
- upper	12.0 vol%
Vapour pressure 20 °C	43.0 hPa
Density	N.A.
Solubility in water	Slight soluble
Organic solvent content	16,0%
Solids contents	0%

10 Stability and reactivity

10.1 – Reactivity

Not particular reactivity danger with other substances under normal operating conditions.

10.2 – Chemical Stability

Stable under normal operating and storage conditions.

10.3 – Possibility of hazardous reactions

No dangerous reactions known.

10.4 - Conditions to avoid

Avoid overheating, electrostatic charge, direct exposition to sun and any lighting source.

10.5 - Incompatible materials

No further relevant information available.

10.6 – Hazardous decomposition products

The thermal decomposition causes the formation of hazardous compounds.

11 Toxical information

11.1 – Information on toxicological effects

Mechanism of action: Pyrethrum acts by keeping the sodium channels open in the neuronal membranes, causing an increased flow of sodium in the cell, maintaining it in a hyper excitability state.

Inhalation	Possible irritations of respiratory tract (in case of continuous inhalation narcotic effects caused by propellants may occur).
Swallowing	Possible irritations, nausea, vomit, abdominal diseases.
Skin contact	Possible irritations.
Eyes contact	Possible irritations.

Toxicological data :

Pyrethrin : LD50 acute rat >2000 mg/kg (oral); LD50 rabbit >2000 mg/kg (dermal acute) ; LC50 rat (4h) 6,8 mg/l.

Piperonyl Butoxid: Ld50 acute rat >2000 mg/kg (oral) ; LD50 rabbit >2000 mg/kg (dermal acute) ; LC50 rat (4h) 5,9 mg/l.

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2-propanol : LD50 acute rat >2000 mg/kg (oral); LD50 rabbit >2000 mg/kg (dermal acute) ; LC50 rat (4h) 72,6 mg/l

12 Ecological information

The mixture is very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.1 – Toxicity

Pyrethrine: LC50 fishes 0,01 mg/l (96h); EC50 Daphnia magna >0,12 mg/l (48h).

Pyperonyl Butoxide: LC50 fishes 5,37 mg/l (96h); EC50 Daphnia magna >0,51 mg/l (48h).

2-propanol: EC50 Daphnia magna >100 mg/l (48h).

12.2 - Persistence and degradability

No further information available.

12.3 – Bioaccumulative potential

No further information available.

12.4 – Mobility in soil

No further information available.

12.5 – Results of PBT and vPvB assessment

No further information available.

12.6 – Other adverse effects

No further information available.

13 Disposal consideration

13.1 – Waste treatment methods

General recommendation: Recover if possible. Operate according to local and national dispositions in force. Containers, even if completely emptied, must not be released to the environment. If they contain residues, they must be classified, stored and sent to an appropriate waste management plant. For a non-professional use the completely empty container can be disposed with household garbage, according to the local dispositions for waste separation.

Classification: The classification of waste is an obligation of the producer. Possible EWC codes: 16 05 04 (gas in pressurized container containing dangerous substances) if the container is not completely emptied of contents, or 15 01 04 (containers in metal) if the containers are completely emptied of contents).

14 Transport information

ADR/RID (street)	AEROSOL Flammable, Class 2, N. ONU 1950, Classification code 5F label 2.1. Limited quantity in packaging: 1 liter (external packaging). Special dispositions 190, 327, 344, 625
IMDG (maritime)	FLAMMABLE AEROSOL, Class 2, N. ONU 1950, Classification code 5F, Label 2.1. Marine pollutant: yes.
ICAO/IATA (air)	FLAMMABLE AEROSOL, Class 2, N. ONU 1950, , Classification code 5F. Label 2.1.

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15 Regulatory information**15.1 – Specific standards and legislation on health, safety and environment for the preparation/substance**

Substances in Candidate List (Art. 59 REACH): None

Restrictions on the product or the substances contained according to EC-Regulation 1907/2006 Enclose XVII:None

Substances subject to authorization (REACH Enclose XIV):None.

Sanitary controls: Workers exposed to this health hazardous chemical agent should undergo to health surveillance performed according to the dispositions of Art. 41 of the proposed Law 81, April 2008, unless risks for safety and health of the workers has been assessed irrelevant, as provided for Art. 224, paragraph 2.

Seveso Category: 7b, 9i.

15.2 – Chemical safety assessment

A chemical safety assessment for the product has been not elaborated.

This information is based on our present knowledge and experience and it is not exhaustive. Unless contrary indications this information should be applied to the product as conform to its specifications. In case of mixing or combinations, assure, that a new danger could not appear. However the user have the responsibility for assuring the

suitability and the completeness of the information, in particular referring to its proper use. It does not except in any

case the user from observing all the laws and the regulations relating to the product, hygiene, workers safety and environmental protection. For further information regarding the preparation, consult the label on the packaging.

16 Other information

Revision Number: 4.0

Compilation date: December 2014. This safety data sheet cancels and replaces the previous version 1 dated 05/06/2014. All the sheet sections has been subjected to modifications.

Hazard indication text (H) mentioned on sheet section 2-3

Flam. Gas 1 – Flammable Gas, Category 1

Flam. Liq. 2 – Flammable Liquid, Category 2

Eye Irrit. 2 – Eye Irritation, Category 2

STOT SE 3 - Specific target organ toxicity – single exposure, Category 3

Asp. Tox. 1 – Aspiration hazard, Category 1

Aquatic Acute 1 – Hazardous to the aquatic environment, acute toxicity Category 1

Aquatic Chronic 1 – Hazardous to the aquatic environment, chronic toxicity Category 1

Acute Tox. 4 – Acute toxicity, Category 4

H220 – Highly flammable gas

H225 – Highly flammable liquid and vapour

H350 – May cause cancer

H340 – May cause genetic defects

H302 – Harmful if swallowed

H312 – Harmful in contact with skin

H332 – Harmful if inhaled

H304 – May be fatal if swallowed and enters airways

H319 – Causes serious eye irritation

H336 – May cause drowsiness or dizziness

H400 – Very toxic to aquatic life

H410 – Very toxic to aquatic life with long lasting effects

Risk phrases text (R) mentioned in sheet section 2-3

R11 – Highly flammable

R12 – Extremely flammable

R21 – Harmful in contact with skin

R36 – Irritating to eyes

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

R67 – Vapours may cause drowsiness and dizziness