

Safety data sheet according to regulation (EC) No. 1907/2006

Trade name: **NeemPro[®]tect**

Creation Date: 07.02.2019

Version: 1.0 / EN

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Print Date: 01.04.2019

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY UNDERTAKING

1.1 Product identifier: NeemPro[®]tect

1.2 Relevant identified uses of the substance or mixture and uses advised against
biocide with insecticidal effects

1.3 Details of the supplier of the safety data sheet

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2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture according Regulation (EC) No. 1272/2008
Not a hazardous mixture

2.2 Label elements

EUH208-0147 – Contains Azadirachtin. May produce an allergic reaction.

EUH401 – To avoid risks to human health and the environment, comply with the instructions for use.

2.3 Other hazards

The mixture does not meet the criteria of PBT or vPvB.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

NeemPro[®]tect is a mixture.

*** 3.2 Mixture**

Margosa Extract (Active ingredient)

Synonyms: Azadirachtin, Neem-kernel-extract; Lead compound: Azadirachtin A).

Concentration: 3-4%

Classification according to Regulation (EC) No. 1272/2008:

GHS07 (Signal word: Warning); Skin Sensibilisation cat. 1; H317; EUH208-0147.

Further information and wording of the H-Phrases can be found in section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures:

General advice

Keep people away from source of risk. Remove contaminated clothes, Consult a physician. Show this safety data sheet to the doctor in attendance.

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If inhaled

Move person into fresh air. If not breathing give artificial respiration. Consult a physician.

In case of skin contact:

Wash off with soap and plenty of warm water. If symptoms occur, consult a physician.

In case of eye contact:

Remove lenses. Rinse thoroughly with plenty of water for at least 15 min. If symptoms occur, consult a physician.

If swallowed:

Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician in case of complaints.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge there are no known symptoms and effects.

4.3 Indication of any immediate medical attention and special treatment needed

If person is unconscious: Call an ambulance.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media: Full water jet.

5.2 Special hazards arising from the substance or mixture

Carbon oxides.

5.3 Advice for firefighters

Keep containers cool with water spray. Inhibit influx of product. In case of exposure to smoke and steam wear self contained breathing apparatus and eye protection.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use eye protection and protective gloves. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Pump of the product or soak up with inert absorbent material and dispose of as hazardous waste. Rinse residues with water and soak up. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personnel protection see section 7 and 8. For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

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Avoid contact with skin and eyes. Avoid breathing vapor or mist. Do not eat, drink or smoke during work. Keep away from food, drinks and feeding stuff. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas. Avoid leakage, consider slip hazard, use collection basins.

Precautions against fire and explosion

Avoid formations of aerosols. Risk of fire and explosion due to work with welding gear on partly drained containers.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of reach of children. Keep container tightly closed in a cool, dry and well-ventilated place. Store apart from food, drink and feed stuff. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid exposure to direct sunlight.

7.3 Specific end uses

General advices for the use as a biocide against oak processionary moth:

- Skin protection plan for pest controller of the Professional Association for Health and Welfare (BGW)
- BAuA Safety Guidance Sheets for biocidal products
- BAuA information on protective measures during professional employment against damage to health from stinging hairs of oak processionary moth (Thaumetopoeae processionea)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

If handled appropriate exposure limit values (AGW [DE], OEL [EU]) are not exceeded.

8.2 Exposure controls

Keep away from food, drink and feed stuff. Wash hands before breaks and at the end of workday. Keep away from children.

Personal protective equipment

Respiratory protection

Not necessary.

Skin protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Eye/face protection

Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as EN 166(EU).

Body protection:

Wear Cotton clothes.

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Environmental exposure controls

See section 6 and 7.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Viscous fluid
Colour:	Honey-like, brownish
Odour:	Characteristic Neem odour
Odour treshhold	No data available
pH-Value:	7 ± 0.02
Melting point/freezing point:	No data available
Boiling point:	No data available
Flash point:	171 °C
Evaporation rate	No data available
Lower explosive limit:	No data available
Upper explosive limit:	No data available
Vapour pressure:	3.6×10 ⁻¹¹ hPa (estimated for Azadirachtin A)
Vapour density:	No data available
Relative density:	0.98 g/ml (20°C)
Partition coefficient:	n-Octanol/water Pow (20°C) =0,99 (for Azadirachtin A)
Auto ignition temperature:	390 °C
Water solubility:	Emulsifiable in water
Viscosity:	281.4 mm ² /s (20°C)
Explosive properties:	NeemPro [®] tect is not explosive
Oxidizing properties :	no oxidizing properties

10. Stability and Reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

NeemPro[®]tect is chemically stable under normal conditions (room temperature).

10.3 Possibility of hazardous reactions

If used appropriate no hazardous reactions are expected.

10.4 Conditions to avoid

High temperatures and strong light sources. Keep away from sources of ignition.

10.5 Incompatible materials

Strong acids. Strong bases. Strong oxidizing or reducing agents.

10.6 Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

11. TOXICOLOGICAL INFORMATION

11.1 Acute toxicity

LD50 (oral, rat) > 5000 mg/kg (a.i. Margosa extract).

LD50 (dermal, rat) > 2000 mg/kg (a.i. Margosa extract).

Skin corrosion/irritaion

Skin (rabbit): not irritating (May cause preliminary light reddening).

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Serious eye damage/eye irritation

Eye (rabbit): not irritating (May cause preliminary light reddening and lacrimation).

Respiratory or skin sensitization

Guinea pig: not sensitizing.

Germ cell mutagenicity

No data available.

Carcinogenity

Mouse: 80 weeks – not induced (formulation NeemAzal-F).

Reproductive toxicity

NOAEL = 5000 mg/kg Diet (formulation NeemAzal-F).

Mutagenicity

Micronucleus test: mouse: negative (a.i. Margosa extract).

Mutagenicity studies: not mutagenic (a.i. Margosa extract).

Specific target organ toxicity – single exposure

Acute toxicity (rat, oral): no clinical signs up to highest dose - 5000mg/kgbw (a.i. Margosa extract).

Specific target organ toxicity – repeated exposure

90 day toxicity (rat, oral): no severe effects up to 525mg/kgbw (a.i. Margosa extract)

Aspiration hazard

No data available.

* **12. ECOLOGICAL INFORMATION**

12.1 Toxicity

Toxicity to fish: *Oncorhynchus mykiss* (acute) LC₅₀ (96 hours) = 160 mg/l.

Oncorhynchus mykiss (prolonged) LC₅₀ (28 days) = 130 mg/l.

Aquatic invertebrates: *Daphnia magna* EC₅₀ acut 1000 mg/l.

Daphnia magna EC₅₀ (21 days) > 50 mg/l.

Reproducibility NOEC (*Daphnia magna*) = 50 mg/l.

(Reduction of reproducibility: NOEC = 6,25 mg/l).

Algae-Inhibition-Test: Not inhibitory, not stimulating.

Chironomids: *Chironomus riparius* NOEC (28 d) = 0,573 mg/l.

Effects on honeybees: Acute: non-hazardous

Reproducibility: No effect on reproducibility at an application rate of 6L/ha.

Effects on earthworms: Non-hazardous (>1000 mg/kg).

12.2 Persistence and degradability

Dt₅₀ Azadirachtin A, soil: 4,76 d.

12.3 Bioaccumulation potential

BCF Azadirachtin A: 1,38.

12.4 Mobility in soil

No data available.

12.5 Results of PBT und vPvB assessment

Criteria for PBT and vPvB are not met.

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12.6 Other adverse effects

Harmful to *Episyrphus balteatus*, *Coccinella septempunctata*, *Chrysoperla carnea*, *Amblyseius cucumeris*.

13. Disposal considerations

13.1 Waste treatment methods

Offer surplus and non-recyclable solutions to a licensed disposal company in accordance with the Directive No. 2008/98/EC.

Waste code [DE]: 02 01 09.

Packaging

Empty containers should be recycled after washing out.

14. TRANSPORT INFORMATION

14.1 UN-Number

Not dangerous goods

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

Not dangerous goods

14.4 Packaging group

Not dangerous goods

14.5 Environmental hazards

Not dangerous goods

14.6 Special precautions for user

See sections 6, 7 and 8

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

NeemPro[®]tect is only released in suitable containers in accordance with traffic laws.

15. Regulatory information

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

Regulation (EC) No. 2037/2000 (Substances, that deplete the ozone layer):

Not applicable.

Regulation (EC) No. 850/2004 (Persistent organic pollutants):

Not applicable.

Regulation (EC) No. 689/2008 (Export and import of dangerous chemicals):

Not applicable.

Regulation (EC) No. 528/2012 (biocide regulation), PAR NeemPro[®]tect

(Registration number: DE-0011980-18)

Use-specific risk mitigation measures:

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The following risk mitigation measures shall be applied unless they can be replaced by technical and/or organizational measures:

- Wear protective chemical resistant gloves during product handling phase.
- A protective coverall (at least type 3 or 4 EN14605) which is impermeable for the biocidal product shall be worn.
- During the application with handheld equipment, a no-spray buffer zone of 20 m to surface waters has to be complied.
- During the application with vehicle mounted equipment, a no-spray buffer zone of 90 m to surface waters has to be complied.

National regulations

Water hazard class

Class: 1 (low water-dangerous - own classification).

Reference to technical rules on hazardous substances

The provisions of TRGS 401, TRGS 510 and TRGS 523 need to be observed

Directive No. 2004/42/EC (Volatile organic compounds)

Not applicable.

Other provisions

- Accident prevention regulations of the Professional Association must be observed
- Skin protection plan for pest controller of the Professional Association for Health and Welfare (BGW)
- BAuA Safety Guidance Sheets for biocidal products
- BAuA information on protective measures during professional employment against damage to health from stinging hairs of oak processionary moth (*Thaumetopoea processionea*)
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15.2 Chemical Safety Assessment

NeemPro[®]tect has not been subjected to a Chemical Safety Assessment.

*** 16. OTHER INFORMATION**

Changes compared to prior versions

Not applicable

Hazard warnings regarding sections 2 and 3

Classification and labeling is in accordance with Regulation (EC) No. 1272/2008.



GHS07 - Warning

Skin sensitization, Category 1

H317 – May cause an allergic skin reaction.

EUH208-0147 – Contains Azadirachtin. May produce an allergic reaction.

EUH401 – To avoid risks to human health and the environment, comply with the instructions for use.

Bibliographical references and data sources

Regulations

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Registration, Evaluation, Authorisation and Restriction (REACH) Regulation (EC) No. 1907/2006, amended by Regulation (EU) No. 453/2010.

Regulation (EC) No. 1272/2008, amended by Regulations (EC) No. 790/2009, No. 286/2011, No. 618/2012, No. 487/2013, No. 758/2013, No. 944/2013 and No. 605/2014.

Abbreviations

ADR	European A greement concerning the International Carriage of D angerous Goods by R oad
CAS	C hemical A bstracts S ervices
EC	E ffective c oncentration E uropean c ommunity
EN	E uropean N orm
IATA-DGR	I nternational A ir T ransport A ssociation- D angerous G oods R egulation
ICAO-TI	I nternational C ivil A viation O rganization - T echnical I nstructions
IMDG-Code	I nternational M aritime C ode for D angerous G oods
LC	L ethal c oncentration
LD	L ethal d ose
MARPOL	M aritime P ollution C onvention
OECD	O rganisation for E conomic C o-operation and D evelopment
PBT	p ersistent, b ioaccumulateable, t oxic
RID	I nternational R ule for Transport of Dangerous Substances by Railway
UN	U nited N ations (Vereinte Nationen)
VOC	V olatile o rganic c ompounds
vPvB	v ery p ersistent, v ery b ioaccumulateable

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall only be used as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Trifolio-M GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.

This safety data sheet is in accordance with Regulation (EC) No. 1907/2006 amended by Regulation (EC) No. 453/2010.