

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

**Trade name: NeemAzal-T/S**

Creation Date: 10.05.2012

Version: 1.2 / EN

Revision Date : 08.05.2014

Page 1 of 8

Print Date: 08.07.2014

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

**1.1 Product identifier: NeemAzal-T/S**

**1.2 Relevant identified uses of the substance or mixture and uses advised against**  
Insekticide and Acaricide

**1.3 Details of the supplier of the safety data sheet**

Trifolio-M GmbH

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**1.4 Emergency telephone number:** Deutsche Vergiftungszentrale Mainz  
Phone: +496131-19240

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**2. HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

Not a hazardous mixture according to Regulation (EC) No. 1272/2008

This mixture is not classified as dangerous according to Directive 67/458/EEC

**2.2 Label elements**

The mixture does not need to be labeled in accordance with EC directives or respective national laws.

**2.3 Other hazards**

None

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substance**

NeemAzal-T/S is a mixture

**\* 3.2 Mixture**

NeemAzal technical (Active ingredient)

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

Concentration: 3-4%

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

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

Classification according to Directive 67/458/EEC respectively Regulation (EC) No. 1999/45:  
Xi; R43 (irritant)

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

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

**Trade name: NeemAzal-T/S**

Creation Date: 10.05.2012

Version: 1.2 / EN

Revision Date : 08.05.2014

Page 2 of 8

Print Date: 08.07.2014

---

**4. FIRST AID MEASURES**

**4.1 Description of first aid measures:**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled**

If breathed in, 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. Consult a physician.

**In case of eye contact:**

Rinse thoroughly with plenty of water for at least 15 min. 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.

**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.

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**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. Wear self contained breathing apparatus for fire fighting if necessary.

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**6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. 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**

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

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

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

Trade name: **NeemAzal-T/S**

Creation Date: 10.05.2012

Version: 1.2 / EN

Revision Date : 08.05.2014

Page 3 of 8

Print Date: 08.07.2014

---

**7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

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

**7.2 Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid exposure to direct sunlight.

**7.3 Specific end uses**

NeemAzal-T/S is a plant protection product which is used as insecticide and acaricide.

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**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**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Keep away from children.

**Personal protective equipment**

**Eye/face protection**

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

**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.

**Body protection:**

Wear Cotton clothes.

**Respiratory protection**

Not necessary.

**Environmental exposure controls**

See section 6 and 7.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Viscous fluid
<b>Colour:</b>	Honey-like, brownish
<b>Odour:</b>	Characteristic Neem odour
<b>Odour treshhold</b>	No data available
<b>pH-Value:</b>	7 ± 0.02
<b>Melting point/freezing point:</b>	No data available
<b>Boiling point:</b>	No data available

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

Trade name: **NeemAzal-T/S**

Creation Date: 10.05.2012

Version: 1.2 / EN

Revision Date : 08.05.2014

Page 4 of 8

Print Date: 08.07.2014

---

<b>Flash point:</b>	171 °C
<b>Evaporation rate</b>	No data available
<b>Flammability (solid,gas)</b>	Not required, for NeemAzal-T/S is neither a solid nor a gaseous formulation
<b>Explosive properties:</b>	NeemAzal-T/S is not explosive
<b>Lower explosive limit:</b>	No data available
<b>Upper explosive limit:</b>	No data available
<b>Vapour pressure:</b>	3.6×10 <sup>-11</sup> hPa (estimated for Azadirachtin A)
<b>Vapour density:</b>	No data available
<b>Relative density:</b>	0.98 g/ml (20°C)
<b>Partition coefficient: (n-octanol/water)</b>	No data available
<b>Auto ignition temperature:</b>	390 °C
<b>Water solubility:</b>	Emulsifiable in water
<b>Viscosity:</b>	281.4 mm <sup>2</sup> /s (20°C)

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**10. Stability and Reactivity**

**10.1 Reactivity**

No data available.

**10.2 Chemical stability**

NeemAzal-T/S 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

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**11. TOXICOLOGICAL INFORMATION**

**11.1 Acute toxicity**

LD50 (oral, rat) > 5000 mg/kg

LD50 (dermal, rat) > 2000 mg/kg

**Skin corrosion/irritation**

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

**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.

**Carcinogenicity**

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

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

Trade name: **NeemAzal-T/S**

Creation Date: 10.05.2012

Version: 1.2 / EN

Revision Date : 08.05.2014

Page 5 of 8

Print Date: 08.07.2014

**Reproductive toxicity**

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

**Mutagenicity**

Micronucleus test: mouse: negative (NeemAzal technical)

Mutagenicity studies: not mutagenic (NeemAzal technical)

**Specific target organ toxicity – single exposure**

No data available.

**Specific target organ toxicity – repeated exposure**

No data available.

**Aspiration hazard**

NOEC (inhalative, rat): >5,4 mg/l/4h (highest possible test concentration)

**Potential health effects**

To the best of our knowledge there are no potential health effects

**Signs and Symptoms of Exposure**

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

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**12. ECOLOGICAL INFORMATION**

**12.1 Toxicity**

Toxicity to fish: Trout (acute) LC50 (96 hours) = 160 mg/L

Trout (prolonged) LC50 (28 days) = 130 mg/L

Aquatic invertebrates: 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.

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)

Effects on beneficials: General: non-hazardous – e.g. predatory mites (Typhlodromus pyri), ground beetles (Poecilus cupreus), seven-spot ladybirds (Coccinella septempunctata) and braconid wasps (e.g. Aphidius rhopalosiphi).

**12.2 Persistence and degradability**

Rapid degradation in water and soil; readily biodegradable.

**12.3 Bioaccumulation potential**

No data available.

**12.4 Mobility in soil**

No data available.

**12.5 Results of PBT und vPvB assessment**

No data available

**12.6 Other adverse effects**

Harmful to syrphid flies (Episyrphus balteatus).

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

Trade name: **NeemAzal-T/S**

Creation Date: 10.05.2012

Version: 1.2 / EN

Revision Date : 08.05.2014

Page 6 of 8

Print Date: 08.07.2014

---

**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.

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**14. TRANSPORT INFORMATION**

**14.1 UN-Number**

ADR/RDI: -

IMDG: -

IATA: -

**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)**

ADR/RDI: -

IMDG: -

IATA: -

**14.4 Packaging group**

ADR/RDI: -

IMDG: -

IATA: -

**14.5 Environmental hazards**

ADR/RDI: no

IMDG Marine pollutant: no

IATA: no

**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**

NeemAzal-T/S is only released in suitable containers in accordance with traffic laws.

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**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.

**National regulations**

**Water hazard class**

Class: 0 (no hazard to water - own classification).

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

Not applicable.

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

Trade name: **NeemAzal-T/S**

Creation Date: 10.05.2012

Version: 1.2 / EN

Revision Date : 08.05.2014

Page 7 of 8

Print Date: 08.07.2014

**Application regulations according to the plant protection Act (PflSchG)**

SB 001 Avoid any unnecessary contact with the product. Misapplication can cause health damage. To avoid risks for humans and environment attend to the directions of use.

SB 010 Keep away from children.

NW 466 Prevent leakage or spillage. Do not let product enter drains. Discharge into environment must be avoided.

NN 391 NeemAzal-T/S is harmful to syrphid flies (*Episyrphus balteatus*).

**15.2 Chemical Safety Assessment**

Chemical Safety Assessment has not been carried out with NeemAzal-T/S.

**\* 16. OTHER INFORMATION**

**Changes compared to prior versions**

This MSDS replaces Version 1.1 from 02.11.2012. Chapters with changes are marked with an asterisk (\*).

**Hazard warnings regarding sections 2 and 3**

Classification and labeling is in accordance with Directive 67/548/EEC respectively Regulation (EC) No. 1999/45 and with Regulation (EC) No. 1272/2008.

**Regulation (EC) no. 1272/2008 (for the active ingredient NeemAzal technical):**



GHS07 - Warning

Skin sensitization, Category 1

H317 – May cause an allergic skin reaction.

**Directive 67/548/EEC (for the active ingredient NeemAzal technical):**



Hazard symbol: Xi - irritant.

R43 – May cause sensitisation by skin contact.

**Bibliographical references and data sources**

**Regulations**

Classification, packaging and labelling of dangerous preparations (Regulation (EC) No. 1999/45), amended by Regulation (EC) No. 1907/2006.

Dangerous Substances Directive 67/548/EEC amended by Directive 2009/2/EC.

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 Regulation (EC) No. 790/2009.

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

Trade name: **NeemAzal-T/S**

Creation Date: 10.05.2012

Version: 1.2 / EN

Revision Date : 08.05.2014

Page 8 of 8

Print Date: 08.07.2014

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### Abbreviations

ADR	Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf der Straße
CAS	<b>C</b> hemical <b>A</b> bstracts <b>S</b> ervices
EC	<b>E</b> ffective <b>c</b> oncentration <b>E</b> uropean <b>c</b> ommunity
EN	<b>E</b> uropean <b>N</b> orm
IATA-DGR	<b>I</b> nternational <b>A</b> ir <b>T</b> ransport <b>A</b> ssociation- <b>D</b> angerous <b>G</b> oods <b>R</b> egulation
ICAO-TI	<b>I</b> nternational <b>C</b> ivil <b>A</b> viation <b>O</b> rganization - <b>T</b> echnical <b>I</b> nstructions
IMDG-Code	<b>I</b> nternational <b>M</b> aritime <b>C</b> ode for <b>D</b> angerous <b>G</b> oods
LC	<b>L</b> ethal <b>c</b> oncentration
LD	<b>L</b> ethal <b>d</b> ose
MARPOL	<b>M</b> aritime <b>P</b> ollution <b>C</b> onvention
OECD	<b>O</b> rganisation for <b>E</b> conomic <b>C</b> o-operation and <b>D</b> evelopment
PBT	<b>p</b> ersistent, <b>b</b> ioaccumulateable, <b>t</b> oxic
RID	<b>I</b> nternational <b>R</b> ule for <b>T</b> ransport of <b>D</b> angerous <b>S</b> ubstances by <b>R</b> ailway
UN	<b>U</b> nited <b>N</b> ations (Vereinte Nationen)
VOC	<b>V</b> olatile <b>o</b> rganic <b>c</b> ompounds
vPvB	<b>v</b> ery <b>p</b> ersistent, <b>v</b> ery <b>b</b> ioaccumulateable

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### 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.