

# SUSTAIN-ABILITY

## SAFETY DATA SHEET

### Section 1. Identification of the material and the supplier

Product: **NeemAzal**  
Product Use: Insecticide and Acaricide  
Restriction of Use: Refer to Section 15

New Zealand Supplier: Horticulture Ltd  
Address: 10 Firth Street  
Drury, 2113

Telephone: +64 9 294 8453  
Fax Number: +64 9 294 7272

**Emergency Telephone: 0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 23 August 2022

### Section 2. Hazards Identification

**Classified hazardous as per EPA Hazardous Substances (Classification) Notice 2020.**

**EPA Approval No: HSR000284**

Signal Word: **Warning**

GHS Classification and Category	Hazard Code	Hazard Statement
Hazardous to the aquatic environment chronic Cat. 3	H412	Harmful to aquatic life with long lasting effects.

Prevention Code	Prevention Statement
P103	Read label before use.
P273	Avoid release to the environment.

Response Code	Response Statement
None allocated	

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

#### Other hazards

Contains Azadirachtin - may cause an allergic reaction in sensitive people

### Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
NeemAzal is a mixture. NeemAzal technical (Active ingredient) Synonyms: Azadirachtin, Neem-kernel-extract; Leading compound: Azadirachtin A).	3 - 4%	11141-17-6

## Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse thoroughly with plenty of water for at least 15 min. Consult a physician.
If on Skin	Wash off with soap and plenty of warm water. 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.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

### Most important symptoms and effects, both acute and delayed

Symptoms: NeemAzal consists of Azadirachtin. This may cause reversible skin sensitisation or allergic reactions.

## Section 5. Fire Fighting Measures

<b>Hazard Type</b>	The product is non-flammable and non-combustible.
<b>Hazards from products</b>	Carbon oxides.
<b>Suitable Extinguishing media</b>	Alcohol-resistant foam, dry chemical or carbon dioxide. Unsuitable extinguishing media: Full water jet.
<b>Precautions for firefighters and special protective clothing</b>	Keep containers cool with water spray. Stop influx of product. Wear self-contained breathing apparatus for firefighting if necessary.
<b>HAZCHEM CODE</b>	<b>None allocated.</b>

## Section 6. Accidental Release Measures

Use personal protective equipment as detailed in Section 8. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

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

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Dispose as per Section 13.

## Section 7. Handling and Storage

### Precautions for Handling:

- Read label before use.
- Avoid release to the environment.
- Avoid leaks, risk of slipping, use collections trays.
- Avoid contact with skin and eyes.
- 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.
- Avoid formation of aerosols.
- Keep away from source of ignition - for example, welding equipment.

### Precautions for Storage:

- Store in cool place.
- Keep out of reach of children.
- 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.

## Section 8 Exposure Controls / Personal Protection

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA	STEL
	ppm mg/m <sup>3</sup>	ppm mg/m <sup>3</sup>

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 13TH EDITION.

### Engineering Controls

Technical measures and the design of appropriate work processes go before the use of personal protective equipment; apply adequate ventilation.

### Personal Protection Equipment



<b>Eyes</b>	Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as EN 166 (EU).
<b>Hands</b>	Suitable gloves type for full contact: Nitrile rubber, - thickness ≥ 0,5 mm Tightness of gloves shall be tested prior to use. Breakthrough time may vary, depending on glove brand and application conditions.
<b>Respiratory</b>	Not required.

## Section 9 Physical and Chemical Properties

<b>Appearance</b>	Viscous honey-like Liquid
<b>Odour</b>	Typical Neem Odour
<b>Odour Threshold</b>	Not available
<b>pH</b>	7.00 ± 0.02
<b>Boiling Point</b>	Not available
<b>Melting Point</b>	Not available
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	171°C
<b>Flammability</b>	Not flammable
<b>Upper and Lower Explosive Limits</b>	Not available
<b>Vapour Pressure</b>	3.6×10 <sup>-13</sup> Pa
<b>Vapour Density</b>	Not available
<b>Relative Density</b>	0.98 g/l
<b>Solubilities in water</b>	Emulsifiable in water
<b>Partition coefficient</b>	log Pow (n-Octanol/Wasser) = 0.99

<b>Auto-ignition Temperature</b>	> 390°C
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	281.4 mm <sup>2</sup> /s (20°C)
<b>Particle Characteristics</b>	Not available

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	Stable under normal conditions.
<b>Reactivity</b>	If used appropriate no hazardous reactions are expected.
<b>Conditions to Avoid</b>	High temperatures and strong light sources. Keep away from sources of ignition.
<b>Incompatible Materials</b>	Strong acids. Strong bases. Strong oxidizing or reducing agents.
<b>Hazardous Decomposition Products</b>	Carbon monoxide. Carbon dioxide.

## Section 11 Toxicological Information

### Acute Effects:

<b>Swallowed</b>	Not applicable. LD50 rat = >5000mg/kg
<b>Dermal</b>	Not applicable. LD50 rat = >2000mg/kg
<b>Inhalation</b>	Not applicable.
<b>Eye</b>	Not applicable.
<b>Skin</b>	Not applicable.

### Chronic Effects:

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	Not applicable.
<b>Germ Cell Mutagenicity</b>	Not applicable.
<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	Not applicable.
<b>STOT/RE</b>	Not applicable. Rat (90 days) NOAEL = 32 mg/kg bw (liver) (NeemAzal® technical)

## Section 12. Ecotoxicological Information

### Harmful to aquatic life with long lasting effects.

#### Toxicity

##### ***Oncorhynchus mykiss***

Acute toxicity LC50: 141mg/l (96h)

##### ***Daphnia magna***

Acute Immobilisation: EC50 > 800mg/l (48h)

Reproduction: NOEC = 3.4 mg/l (21d)

##### ***Chironomus riparius***

Chronic toxicity NOEC = 0.573 mg/l

##### ***Scenedesmus subspicatus***

Growth rate ErC50 = >2494mg/l (72h)

##### ***Apis mellifera***:

Acute oral toxicity: LD50 > 561µg/bee (

Acute contact toxicity: LD50 > 2000µg/bee

##### ***Eisenia fetida***

Acute toxicity: EC50 >1000 mg/kg

<b>Persistence and degradability</b>	Rapid degradation in water and soil; readily biodegradable.
<b>Bioaccumulation</b>	BCF Azadirachtin A: 1,38
<b>Mobility in Soil</b>	No data available.
<b>Other adverse effects</b>	Harmful to syrphid flies ( <i>Episyrphus balteatus</i> ), ladybird ( <i>Coccinella septempunctata</i> ), green lacewings ( <i>Chrysoperla carnea</i> ), predatory mites ( <i>Amblyseius cucumeris</i> )

Do not allow to enter waterways.

### Section 13. Disposal Considerations

**Disposal methods:** Triple rinse and dispose of according to Local Regulations. Empty containers should be recycled after washing out.

**Precautions or conditions to avoid:** Avoid release to the environment

### Section 14 Transport Information

**This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2020**

### Section 15 Regulatory Information

EPA Approval Code: **HSR000284**

HSWA & EPA Controls	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000L
Emergency Response Plan	1000L
Secondary Containment	1000L
Restriction of Use	Refer to controls documents on <a href="http://www.epa.govt.co.nz">www.epa.govt.co.nz</a>

### Section 16 Other Information

#### Glossary

Cat	Category
EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

#### References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020

## 5. HSW (Hazardous Substances) Regulations 2017

### Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

The information herein is given in good faith, but no warranty, express or implied is made.

Please contact the New Zealand distributor, if further information is required.

Issue Date: 23 August 2022                      Review Date: 23 August 2027