

NeemAQ® MATERIAL SAFETY DATA SHEET**1: PRODUCT AND COMPANY IDENTIFICATION**

Product Name	NeemAQ®
Product Code	NeemAQ20L
Product 1° DG Class	3C (Flammable liquid)
Revision Date	January 2019
Product Description	NeemAQ® is a Commercial Horticultural Insecticide containing active ingredients in the liminoid class extracted from seed kernels of the Neem tree (<i>Azadirachta indica</i>). It is used as a Insect Growth Regulator (IGR) in the control of certain insect pests of horticultural crops.
Formulation type	Liquid Soluble Concentrate – SL
Active ingredient(s)	75 gram per litre Neem Seed Kernel Extract (NSKE) containing Azadirachtin isomers and related liminoids and their derivatives
Packaging	20 litre PE UN Approved Jerry Can with tamper evident lid (ALTO NZ)

Supplied by Manufacturer

Suntec (NZ) Ltd,
Manufacturing and Office
33 Shelley Street Palmerston North

Contact

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Suntec NZ Ltd 24 hour emergency contact 0274796143

internet www.suntec.co.nz/neemaq.htm

email suntec@suntec.co.nz

**Poisons Information Centre
New Zealand
Telephone 0800 764766**

2. HAZARD IDENTIFICATION**Emergency Overview**

- Low toxicity by ingestion.
- Irritating or damaging to eyes and mildly irritating to skin.
- Vapours may cause dizziness, nausea, headaches, lethargy, or disorientation.
- Vapours may be flammable in closed environment

Carcinogenicity Not carcinogenic

Acute Health Hazard Low toxicity.

Chronic Health Hazard Avoid long term exposure.
HSNO CLASSIFICATION 6.8B

Inhalation Avoid inhalation of NeemAQ® fumes. Use in well ventilated area

Eye irritation AVOID CONTACT WITH EYES. Can be damaging or corrosive to eyes.
HSNO CLASSIFICATION 8.3A

Skin Absorption Avoid prolonged skin contact.
HSNO CLASSIFICATION 6.5B

Ingestion NONE

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3: COMPOSITION / HAZARDOUS INGREDIENTS INFORMATION

Hazardous Ingredient	Concentration	CAS Number	UN Number	Classification
Active ingredient NSKE	75 g/l (7.5%)	N/A	N/A	9.1B, 6.8B
– NeemAQ® Manufactured/Extracted/Concentrated by Proprietary Method				-
Ethyl alcohol	200 ml/l (20%)	64-17-5	1170	3.1A

Other non-hazardous/non-regulated ingredients and water make up product to total volume and 100%

HSNO classification of the substance

- 3.1C Flammable liquid – low hazard,
- 8.3A substances that are corrosive to the eyes,
- 6.5B Substances that are irritating to the skin,
- 6.8B Substances that affect reproduction and development following long term exposure,
- 9.1B Environmentally hazardous materials toxic to aquatic life

4. FIRST AID MEASURES

Inhalation	Remove patient to fresh air. If symptoms of dizziness, nausea, headache, lethargy, or disorientation arise seek urgent medical attention
Eye Contact	If splashed in eyes <ul style="list-style-type: none"> • Remove contact lenses if worn • Wash eyes with plenty of warm water for approximately 15 minutes. • Seek medical assistance.
Skin Contact	If spilt on skin <ul style="list-style-type: none"> • Remove clothing from affected area • Wash with warm water and detergent. • Rinse with clean water. • If irritation develops seek medical attention
Ingestion	No recommended procedures. Give plenty of water. If nausea or vomiting occurs seek urgent medical attention.
Emergency Treatment	No recommended procedures. Treat patient symptomatically.

5. FIRE FIGHTING MEASURES

NeemAQ® is not combustible, but if heated in a closed environment may release flammable vapours.

Flash point 45°C

HSNO CLASSIFICATION 3.1C

Extinguishing Media If NeemAQ® is involved in fire use extinguishing media suitable for the fire.

6. SPILLAGE - ACCIDENTAL RELEASE MEASURES

Land Spill	Small spills (< 20 litre) - Flush area with hot water and detergent. OR Bulk spill (>20 litre) <ul style="list-style-type: none"> • Absorb spilt material with inert material (sand, earth, sawdust) • Ventilate area. • Clearly label containers of spilt material • Dispose of contained spilt material in approved landfill.
Water Contamination	No special precautions and No long term adverse effects Avoid further spillage of concentrate into waterway. Ensure adequate dilution of spilt material.

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7. HANDLING AND STORAGE

Storage

- Store sealed and dry under cool dark conditions.
- Keep out of reach of children
- Keep out of direct sunlight.
- Keep away from ignition sources.
- Do not store diluted NeemAQ®
- Do not mix with any other material.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Handling NeemAQ® Concentrate

Skin Protection (gloves), Respiratory and eye protection recommended.
Dispense NeemAQ® in a well ventilated area.

Applicators

Respirator and eye protection recommended during measuring and mixing, and if applicator is in close proximity to the spray material during application, eg in greenhouse. For outside use normal clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Dark brown or black liquid
Physical State	Liquid
Odour	Alcoholic, coffee, spice
Specific Gravity	980 to 990 g per litre
pH	4.5 +/- 0.1
Solubility in Water	Soluble.
Flammability	Flash Point (closed cup) 45°C
HSNO CLASSIFICATION 3.1C	

10. STABILITY AND REACTIVITY

Stability

Under normal storage conditions NeemAQ® is stable for a period of 2 years from the date of manufacture. NeemAQ® characteristics do not change during this period.

Reactivity

NeemAQ® may react with alkaline materials, or organic solvents, resulting in combination products of more neutral pH and unknown qualities.

11: TOXICOLOGICAL INFORMATION

ORAL LD₅₀	>2000 mg/kg (NON TOXIC)
DERMAL LD₅₀	> 2000 mg/kg (NON TOXIC)
Skin Reactivity	draize grade < 1.5
Eye Corrosivity	Potentially corrosive to eyes
HSNO CLASSIFICATION 8.3A	

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12: ECOLOGICAL INFORMATION

ECOTOXICITY

- Toxic to aquatic life - crustaceans and aquatic insects.
- Harmful to Aquatic life –fish: 96hr LC₅₀ for rainbow trout approximately 1230 mg/l.
- Surfactant is a marine pollutant.

HSNO CLASSIFICATION 9.1B

ECOTOXIC CONSIDERATIONS

- NeemAQ® rapidly decomposes after dilution.
- Active ingredients deteriorate under conditions of high pH, UV light, temperature above 50°C .

13: DISPOSAL CONSIDERATIONS

Disposal of empty containers

Triple rinse empty containers and either

- dispose in landfill

Or contact Suntec NZ Ltd to arrange recycling through authorized wholesale supplier

14: TRANSPORT INFORMATION

Proper Shipping Name	NeemAQ® FLAMMABLE LIQUID
Technical name	CONTAINS ETHYL ALCOHOL
Class – Primary	3.1C
UN Number	1170
Hazchem Code	2Y
Flash Point	45°C
Packing Group	III

15: REGULATORY INFORMATION

NeemAQ® is registered pursuant to the ACVM Act 1997 Registration Number P8526

NeemAQ® is approved pursuant to HSNO Act 1996 Approval code HSR100740

Controls: Workplace Health and Safety

- Quantities must be added to a hazardous substance inventory maintained on site
- PPE must be available and used when handling the product
- This MSDS must be accessible within 10 minutes of any incident occurring
- Product must remain labelled in its original packaging
- Staff should be trained in safe handling of agrichemicals

Health Risks: Any quantity (6.3B)

Location Compliance Certificate: Trigger Quantity >500 litres (3.1C)

Fire Extinguishers: Trigger Quantity >500 litres

Signage: Trigger Quantity 1000 litres (3.1C, 8.3A, 9.1B)

Secondary Containment: Trigger Quantity >1500 litres (9.1B)

Emergency Response Plan: Trigger Quantity >2000 litres (9.1B)

16: OTHER

Disclaimer

The information contained in this Material Safety Data Sheet (MSDS) is correct at the time of issue, to the best of the knowledge of the manufacturer Suntec NZ Ltd. The information contained in this MSDS relates only to NeemAQ® supplied directly by Suntec NZ Ltd or its authorised distributors, and does not apply to repackaged product or to its use in combination with other materials or in any process.

Users of NeemAQ® are encouraged to follow label directions at all times and comply only with those label directions. Suntec NZ Ltd assumes and shall incur no liability for any damages, losses, injuries, costs, or consequential damages that may result from the use or misuse of NeemAQ® and the recipient assumes all of such liability.

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