



SAFETY DATA SHEET

VERTIGO 1.8% EC

Revision date: 15.05.2017

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifiers

Product name: Vertigo 1.8% EC
Chemical name: Abamectin
CAS No.: 71751-41-2

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

Identified uses: Insecticide for agricultural use

Details of the supplier of the safety data sheet

Supplier: Almandine Corporation SA
Gotthardstrasse 3
6300 Zug
Switzerland
Tel: +44 20 8995 8391 (UK office)
Fax: +44 20 8995 7639
Email: almuk@almandine.com

Formulation site: Liad Agro Ltd Agrosmart Ltd
Biet Shemesh Huddersfield
Israel UK

Emergency telephone number

Tel: +44 20 8995 8391 (SDS support, 9.00-5.00 pm; Mon-Fri only, UK)

SECTION 2: HAZARDS IDENTIFICATION

Acute tox (oral) 4
Acute tox (inhal) 4
Eye irrit. 2
STOT RE 2
Aq acute 1
Aq chronic 1



Pictograms:

Signal Word: Danger

Hazard statements:
H302: Harmful if swallowed
H317: May cause an allergic skin reaction
H319: Causes serious eye irritation
H332: Harmful if inhaled



H373: May cause damage to organs (nervous system) through prolonged or repeated exposure

H410: Very toxic to aquatic life with long-lasting effects

Precaution statements:

P102: Keep out of reach of children

P260: Do not breathe mist or spray

P280: Wear protective gloves/clothing/eye protection/face protection

P305/351/338: IF IN EYES: rinse cautiously with water for several minutes; remove contact lenses if present and easy to do; continue rinsing.

P314: Get medical advice if you feel unwell

P391: Collect spillage

P501: Dispose of contents/container in accordance with local and national regulations

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Conc %	Signal word	H Statements
Abamectin	71751-41-2	1.8	Danger	H300, H330, H361d, H372, H400, H410
Ethoxylated fatty alcohol	345642-79-7	<10	Danger	H318, H400
2,6-di-tert-butyl-p-cresol	128-37-0	<5	Warning	H410

See Sections 2 and 16 for H Statements.

SECTION 4: FIRST AID MEASURES**First Aid**

If poisoning occurs, immediately contact a doctor or Poisons Information Centre and follow the advice given. Show this Safety Data Sheet to the doctor.

Inhalation:

If inhaled, remove to fresh air, keep warm and at rest. Administer oxygen or artificial respiration if needed. Seek medical attention immediately.

Skin contact:

Avoid contact with skin. Carefully remove contaminated clothing and footwear. Wash affected areas with large amounts of water for at least 10 minutes. Seek medical advice if concerned.

Eye contact:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open; consult an eye specialist.

Ingestion:

Rinse mouth and then drink plenty of water. Seek medical attention immediately. DO NOT induce vomiting



Treatment: Treatment: treat according to symptoms (decontamination, maintain vital functions); no known specific antidote.

Symptoms and Effects

Early signs of intoxication include mydriasis (dilated pupils), ataxia (unsteadiness), and muscle tremors. May cause irritation of the throat and a feeling of tightness in the chest. May cause burning and redness in the throat. Nausea and stomach pain may occur. Irritating to eyes. May cause mild irritation to skin and skin sensitization in susceptible individuals.

Immediate medical attention or special treatment

Medical advice: This material is believed to enhance GABA activity in animals. Drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) should be avoided. Toxicity can be minimised by early administration of chemical absorbents (e.g. activated charcoal). Any loss of fluids should be addressed, otherwise treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media: Water fog, fine water spray, foam, dry chemical, carbon dioxide. Do not use water jet.

Hazards from combustion Products: May produce toxic gases: carbon monoxide and carbon dioxide. Smoke can be generated.

Advice for fire fighters: Fire-fighters should wear full protective gear, including self-contained breathing apparatus. Keep unnecessary people away. Use water spray to cool containers.

Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of fire control water or other extinguishing agent and spillage safely.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear PPE as recommended in section 8. This means wearing eye protection, chemically resistant gloves, boots, chemical-protective clothing, and positive pressure respirator for large spills. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid contact with spilled material or contaminated surfaces. Keep people and animals away.

Environmental precautions: Prevent product from entering drains or water courses. Warn the local water authority if water-courses become contaminated.

Clean-up methods: Pick up and arrange disposal without creating aerosol. Contain spill and absorb with earth, sand, clay, or other absorbent material, collect and store in sealed drums for safe disposal. Decontaminate the area and equipment by washing areas with water. Keep in suitable, closed containers for disposal. Contaminated extinguishing water must be disposed of in accordance with official regulations.



SECTION 7: HANDLING AND STORAGE

- Safe handling:** Read label before use.
Avoid contact with skin and eyes. Irritating to eyes. Avoid breathing vapour or spray. For product in eyes, wash immediately with water. For product on skin, immediately wash contamination with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.
- Safe storage:** Keep out of reach of children. Keep in original containers, tightly closed, away from food, drink and animal feeds with good ventilation. Keep away from heat, direct sunlight, moisture and oxidants. Not flammable under normal conditions of use. Protect from temperatures above 40°C.
- Specific end uses:** Registered for crop protection.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- Occupational Exposure limits:** Abamectin 0.02 mg/m³ TWA
- Engineering measures:** Use only in well-ventilated areas. If necessary, use local exhaust ventilation to keep airborne concentration below exposure limits.
- Personal protective equipment:**
Personal protective equipment should always be certified to appropriate standards. Wear face shield or goggles.
Wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, heavy-duty shoes or boots.
Wear elbow length butyl rubber gloves.
If working in a poorly ventilated area or if occupational exposure levels are likely to be exceeded, wear a respirator with filter for vapours.
After each day's use, wash gloves, goggles or face shield, respirator if worn, and contaminated clothing.

Do not re-enter treated areas without protective clothing until spray residue has dried.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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| a) Appearance: | Pale yellow to light brown clear liquid |
| b) Odour: | aromatic |
| c) Odour threshold: | none set |
| d) pH: | 5 to 8 |
| e) Melting point/freezing point: | 161°C |
| f) Boiling point/boiling range: | Not measured |
| g) Flash-point: | >62°C |



- | | |
|--|---|
| h) Evaporation rate: | Not measured |
| i) Flammability (solid/gas): | Not flammable |
| j) Upper/lower flammability or explosive limits: | None set |
| k) Vapour pressure: | 0.0037 mPa (25°C) (tech.) |
| l) Vapour density: | $2.7 \times 10^{-3} \text{ Pa m}^3 \text{ mol}^{-1}$ (tech) |
| m) Relative density: | 0.97 – 0.99 g/ml (20°C) |
| n) Solubility: | 1.21 mg/L (water, 25°C; tech.) |
| o) Partition coefficient: | Log P _{ow} 4.4 (tech.) |
| p) Auto-ignition temperature: | >270°C |
| q) Decomposition temperature: | Not determined |
| r) Viscosity: | Not determined |
| s) Explosive properties: | Not explosive |
| t) Oxidising properties: | Not an oxidiser |

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Stable under normal conditions of use. Will not polymerise.

Chemical stability: The product is stable if stored and handled as indicated.

Possibility of hazardous reactions:

No hazardous reactions when stored and handled according to instructions. Hazardous polymerisation does not occur.

Conditions to avoid: Sources of ignition and extreme heat.

Incompatible materials: Strong oxidising agents, strong acids.

Hazardous decomposition products:

Combustion or thermal decomposition will evolve toxic and irritant vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

Oral toxicity: LD₅₀ rat: 300 - 2000 mg/kg (GHS Cat 4)

Dermal toxicity: LD₅₀ rat: >2000 - 5000 mg/kg (GHS Cat 5)

Inhalation toxicity: LC₅₀ rat 4 h >5.04 mg/L (similar formulation)

Skin irritation: Not an irritant

Eye irritation: Irritant

Skin sensitisation: May cause skin sensitisation

WHO Classification: II, moderately hazardous

SECTION 12: ECOLOGICAL INFORMATION



Almandine Corporation SA

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Email: almch@almandine.com

Ecotoxicity (based on similar formulation)

Fish toxicity:	LC ₅₀ 96 h	rainbow trout	0.247 mg/L
Daphnia toxicity:	EC ₅₀ 48 h	<i>Daphnia magna</i>	0.095 mg/L
Algal toxicity:	EC ₅₀ 72 h	Green algae	80 mg/L

Toxic to bees in direct contact.

Persistence and biodegradability

Abamectin is not persistent in soil or water.

Bioaccumulative potential: Abamectin does not bioaccumulate

Mobility in soil: Slight mobility in soil

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods:

Product: Dispose of waste product through an official waste contractor.
Obtain advice from local waste regulation authority.

Contaminated packaging: Triple- or pressure-rinse containers before disposal. Add rinsings to spray tank.
Do not dispose of undiluted chemicals on-site.
Do not burn empty containers. Recycle, or return to supplier through local schemes if applicable. Disposal should be in accordance with local, state or national legislation.

SECTION 14: TRANSPORTATION INFORMATION

UN Number:	3082		
UN Proper Shipping Name:	Environmentally hazardous substance, liquid, N.O.S. (contains abamectin)		
Transport hazard class:	ADR/RID: 9	IMDG: 9	IATA: 9
Packaging group:	ADR/RID: III	IMDG: III	IATA: III
Environmental hazard:	ADR/RID: Yes	IMDG: Marine pollutant	IATA: Yes

SECTION 15: REGULATORY INFORMATION

No additional regulatory information required for this product

SECTION 16: OTHER INFORMATION

**Additional relevant H statements:**

These phrases are for hazardous components in the product but are not at levels that require H statements. They provide additional information on risks.

H300	Fatal if swallowed
H318	Causes serious eye damage
H330	Fatal if inhaled
361d	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life

TWA: Time weighted average: average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

No liability is accepted for any injury, loss, damage or cost arising directly or indirectly from the use of the product or from the use of information contained within the safety data sheet since the customer's handling of the product is necessarily beyond our control. The supplied data are based on current knowledge and experience. This safety data sheet is intended to describe our product in terms of safety requirements. The customer should determine by appropriate trials that the product is suitable for his intended use.

Reason for revision: formatting based on EC No 1272/2008.
Sections 9, 11 and 12 based on available EU and own data.
Classification: EU and own data.
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