

SAFETY DATA SHEET



ARYSTA LIFESCIENCE ABAMECTIN INSECTICIDE/MITICIDE EC

Version 2.11 Revision Date: 05.05.2016 MSDS Number: 000000002365 Country: AU
Language: EN

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ARYSTA LIFESCIENCE ABAMECTIN
INSECTICIDE/MITICIDE EC

Product code : 000000002365

Details of the supplier of the safety data sheet

Company: Arysta LifeScience Australia Pty Ltd
c/o Level 3, 70 Hindmarsh Square
Adelaide SA
Australia
5000
Telephone : + 61 8 8112 0900

Prepared by sds.request@arysta.com

Further information for the safety data sheet :
sds.request@arysta.com

1.4 Emergency telephone number

Emergency telephone number: +61 2801 44558, ORICA : 1800 033 111 (24 hr Service)
For advice, contact a Poisons Information Centre (Phone: Australia
131 126 or New Zealand 0800 764 766) or a doctor at once.
For additional emergency telephone numbers see section 16 of the
Safety Data Sheet.

Recommended use of the chemical and restrictions on use

Recommended use : Insecticide
Miticide

Restrictions on use : Agriculture
For professional users only.
APVMA No: 63632

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) : Category 4

SAFETY DATA SHEET



ARYSTA LIFESCIENCE ABAMECTIN INSECTICIDE/MITICIDE EC

Version 2.11 Revision Date: 05.05.2016 MSDS Number: 000000002365 Country: AU
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Acute toxicity (Inhalation) : Category 2
Serious eye damage/eye irritation : Category 2A
Specific target organ toxicity - repeated exposure : Category 2 (Nervous system)

GHS Label element

Hazard pictograms :



Signal word : Danger

Hazard statements : H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H373 May cause damage to organs (Nervous system) through prolonged or repeated exposure.

Precautionary statements : **Prevention:**
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear eye protection/ face protection.
P284 Wear respiratory protection.
Response:
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338 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/ attention if you feel unwell.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

Hazardous substance
Dangerous goods

SAFETY DATA SHEET



ARYSTA LIFESCIENCE ABAMECTIN INSECTICIDE/MITICIDE EC

Version 2.11 Revision Date: 05.05.2016 MSDS Number: 000000002365 Country: AU
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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture
Chemical nature : Insecticide

Hazardous components

Chemical Name	CAS-No.	Concentration (% w/w)
Avermectin	71751-41-2	< 10

SECTION 4. FIRST AID MEASURES

General advice : For advice, contact a Poisons Information Centre (Phone: Australia 131 126 or New Zealand 0800 764 766) or a doctor at once.

If inhaled : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If not breathing, give artificial respiration.
Call a physician or poison control centre immediately.
If breathing is difficult, give oxygen.
Keep respiratory tract clear.

In case of skin contact : Wash off with soap and plenty of water.
If symptoms persist, call a physician.
Take off contaminated clothing and wash before reuse.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If eye irritation persists, consult a specialist.

If swallowed : Rinse mouth with water.
If victim is fully conscious, give a cupful of water.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Do not give milk or alcoholic beverages.
Obtain medical attention.

Most important symptoms and effects, both acute and delayed : irritant effects
Symptoms may be delayed.
Harmful if swallowed.
Causes serious eye irritation.
Fatal if inhaled.
May cause damage to organs through prolonged or repeated exposure.

Notes to physician : For specialist advice physicians should contact the Poisons

SAFETY DATA SHEET



ARYSTA LIFESCIENCE ABAMECTIN INSECTICIDE/MITICIDE EC

Version 2.11 Revision Date: 05.05.2016 MSDS Number: 000000002365 Country: AU
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Information Service.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Dry powder
Alcohol-resistant foam
Carbon dioxide (CO₂)
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.
Burning produces noxious and toxic fumes.
- Specific extinguishing methods : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.
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SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation.
- Environmental precautions : Do not flush into surface water or sanitary sewer system.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.
-

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : Avoid contact with skin and eyes.
For personal protection see section 8.
Provide sufficient air exchange and/or exhaust in work rooms.
Dispose of rinse water in accordance with local and national regulations.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
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SAFETY DATA SHEET



ARYSTA LIFESCIENCE ABAMECTIN INSECTICIDE/MITICIDE EC

Version 2.11 Revision Date: 05.05.2016 MSDS Number: 000000002365 Country: AU
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Wash hands before breaks and at the end of workday.

Conditions for safe storage : 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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

Hand protection

Remarks : Polyvinyl alcohol or nitrile- butyl-rubber gloves Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Before removing gloves clean them with soap and water.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : light yellow

Odour : characteristic

Odour Threshold : No data available

pH : 4.05, 1% Solution

Melting point/range : Not applicable

Boiling point/boiling range : 76.5 °C

Flash point : No data available

Evaporation rate : No data available

Upper explosion limit : No data available

SAFETY DATA SHEET



ARYSTA LIFESCIENCE ABAMECTIN INSECTICIDE/MITICIDE EC

Version 2.11 Revision Date: 05.05.2016 MSDS Number: 000000002365 Country: AU
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Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : 0.950 - 0.965 (20 °C)

Solubility(ies)

 Water solubility : No data available

 Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

 Viscosity, dynamic : No data available

 Viscosity, kinematic : No data available

Oxidizing potential : No information available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable under recommended storage conditions.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reactions : No decomposition if used as directed.

Conditions to avoid : Extremes of temperature and direct sunlight.

Incompatible materials : Strong oxidizing agents
Strong acids and strong bases

Hazardous decomposition products : Burning produces noxious and toxic fumes.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat): 671.4 mg/kg

SAFETY DATA SHEET



ARYSTA LIFESCIENCE ABAMECTIN INSECTICIDE/MITICIDE EC

Version 2.11 Revision Date: 05.05.2016 MSDS Number: 000000002365 Country: AU
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Acute inhalation toxicity : LC50 (Rat): 1.4125 mg/l
Exposure time: 4 h

Components:

Avermectin:

Acute oral toxicity : LD50 (Rat): 11 mg/kg
LD50 (Rat, male and female): 8.7 - 12.8 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 1,100 mg/l
Exposure time: 4 h
LC50 (Rat, male and female): 0.21 mg/l
Exposure time: 4 h
Method: OECD Test Guideline 403
GLP: yes

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
LD50 (Rabbit, male and female): > 2,000 mg/kg
Method: OECD-Guideline No. 402

Skin corrosion/irritation

Product:

Remarks: May cause skin irritation in susceptible persons.
Not classified due to lack of data.

Components:

Avermectin:

Species: Rabbit
Method: OECD-Guideline No. 404
Result: No skin irritation

Serious eye damage/eye irritation

Product:

Result: Irritating to eyes.

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

Components:

Avermectin:

Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

SAFETY DATA SHEET



ARYSTA LIFESCIENCE ABAMECTIN INSECTICIDE/MITICIDE EC

Version 2.11 Revision Date: 05.05.2016 MSDS Number: 000000002365 Country: AU
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Respiratory or skin sensitisation

Product:

Remarks: No data available

Components:

Avermectin:

Test Type: Maximisation Test (GPMT)

Species: Guinea pig

Assessment: Did not cause sensitisation on laboratory animals.

Method: OECD Test Guideline 406

Chronic toxicity

Germ cell mutagenicity

Components:

Avermectin:

Genotoxicity in vitro : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Method: Mutagenicity (Escherichia coli - reverse mutation assay)
Result: negative

Genotoxicity in vivo : Test Type: in vivo assay
Species: Mouse (males)
Cell type: Bone marrow
Result: negative

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

Carcinogenicity

Components:

Avermectin:

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

Reproductive toxicity

Components:

Avermectin:

Reproductive toxicity - Assessment : No toxicity to reproduction
Effects on or via lactation

STOT - repeated exposure

Components:

Avermectin:

SAFETY DATA SHEET



ARYSTA LIFESCIENCE ABAMECTIN INSECTICIDE/MITICIDE EC

Version 2.11 Revision Date: 05.05.2016 MSDS Number: 000000002365 Country: AU
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Exposure routes: Oral
Target Organs: Central nervous system
Assessment: May cause damage to organs through prolonged or repeated exposure.

Exposure routes: Inhalation
Target Organs: Central nervous system
Assessment: May cause damage to organs through prolonged or repeated exposure.

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Avermectin:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill)): 0.0096 mg/l
Exposure time: 96 h
(Oncorhynchus mykiss (rainbow trout)): 0.036 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.00037 mg/l
Exposure time: 48 h
Test Type: static test

Toxicity to algae : (Scenedesmus species): > 100 mg/l
Exposure time: 9 d
(Pseudokirchneriella subcapitata (green algae)): 0.006 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOEC: 0.00052 mg/l
Exposure time: 72 d
Test Type: flow-through test

Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Components:

SAFETY DATA SHEET



ARYSTA LIFESCIENCE ABAMECTIN INSECTICIDE/MITICIDE EC

Version 2.11 Revision Date: 05.05.2016 MSDS Number: 000000002365 Country: AU
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Avermectin:

Biodegradability : aerobic
Inoculum: activated sludge
Concentration: 100 mg/l
Result: According to the results of tests of biodegradability this product is not readily biodegradable.
Biodegradation: 3 %
Exposure time: 28 d

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

Avermectin:

Partition coefficient: n-octanol/water : log Pow: 4.4 (20 °C)

Mobility in soil

Product:

Mobility : Remarks: No data available

Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of wastes in an approved waste disposal facility.
The product should not be allowed to enter drains, water courses or the soil.
In accordance with local and national regulations.
Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.

Contaminated packaging : Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

SAFETY DATA SHEET



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SECTION 14. TRANSPORT INFORMATION

International Regulation

UNRTDG

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(Abamectin)
Class : 9
Packing group : III
Labels : 9

IATA-DGR

UN/ID No. : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S., Environmentally hazardous substance, liquid, n.o.s.
(Abamectin)
Class : 9
Packing group : III
Labels : Miscellaneous
Packing instruction (cargo aircraft) : 964
Packing instruction (passenger aircraft) : 964

IMDG-Code

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(Abamectin)
Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes

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

Not applicable for product as supplied.

National Regulations

ADG

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(Abamectin)
Class : 9
Packing group : III
Labels : 9
Hazchem Code :

SAFETY DATA SHEET



ARYSTA LIFESCIENCE ABAMECTIN INSECTICIDE/MITICIDE EC

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Remarks : SP No. AU01 Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in;
(a) packagings that do not incorporate a receptacle exceeding 500 kg(L); or
(b) IBCs.

SECTION 15. REGULATORY INFORMATION

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

R-phrase(s) : R20/22 Harmful by inhalation and if swallowed.
R36 Irritating to eyes.
R48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s) : S35 This material and its container must be disposed of in a safe way.
S36/37 Wear suitable protective clothing and gloves.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S57 Use appropriate container to avoid environmental contamination.
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Standard for the Uniform Scheduling of Medicines and Poisons : No poison schedule number allocated

Prohibition/Licensing Requirements : There is no applicable prohibition or notification/licensing requirements, including for carcinogens under Commonwealth, State or Territory legislation.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

(Q)SAR - (Quantitative) Structure Activity Relationship; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; ECx

SAFETY DATA SHEET



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- Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; OECD - Organization for Economic Cooperation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TDG - Transportation of Dangerous Goods; UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice

Date format : dd.mm.yyyy

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

AU / EN

Carechem24 International Worldwide Coverage

Emergency Phone Number

<u>Europe:</u>	All European Countries	+44 (0) 1235 239 670 (NCEC)
<u>Asia Pacific:</u>	East / South East Asia – Regional Number	+65 3158 1074
	Australia	+61 2801 44558
	New Zealand	+64 9929 1483
	China	+86 532 8388 9090

SAFETY DATA SHEET



ARYSTA LIFESCIENCE ABAMECTIN INSECTICIDE/MITICIDE EC

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	Japan	+81 345 789 341
	Indonesia	00780 3011 0293
	Malaysia	+60 3 6207 4347
	Thailand	001800 1 2066 6751
	Korea	+65 3158 1285 +82 (0)234 798 401
	Vietnam	+65 3158 1255
	India	+65 3158 1198 0800 100 7479
	Pakistan	+65 3158 1329
	Philippines	+65 31581203
	Sri Lanka	+65 3158 1195
	Emergency Phone Number	+65 3158 1200
<u>Middle East / Africa:</u>	Arabic speaking countries	+44 (0) 1235 239 671
	South Africa	+27 21 300 2732
	All other countries	+44 (0) 1235 239 670
<u>America</u>	United States of America and Canada	+1866 928 0789 +1 215 207 0061
<u>Latin America:</u>	Brazil	+55 11 3197 5891
	Mexico	+52 555 004 8763
	Chile	+56 225 829 336
	All other countries	+44 (0) 1235 239 670