

SAFETY DATA SHEET

FOLIARFLO® C SEED TREATMENT



Version 1.5 Revision Date: 10.11.2015 MSDS Number: 400000000108 Country: AU
Language: EN

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : FOLIARFLO® C SEED TREATMENT

Product code : 400000000108

Manufacturer or supplier's details

Company: Arysta LifeScience Australia Pty Ltd
c/o Level 7, 435 King William Street
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 additional emergency telephone numbers see section 16 of the
Safety Data Sheet.

Recommended use of the chemical and restrictions on use

Recommended use : Seed treatment
Fungicide
Insecticide

Restrictions on use : Agriculture
For professional users only.
APVMA No: 63340

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) : Category 4

Reproductive toxicity : Category 2

GHS Label element

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Hazard pictograms :

Signal word : Warning

Hazard statements : H302 Harmful if swallowed.
H361 Suspected of damaging fertility or the unborn child.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P281 Use personal protective equipment as required.
Response:
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
Storage:
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
Non-dangerous goods
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Triadimenol - 150 g/L
Cypermethrin - 4 g/L

Hazardous components

Chemical Name	CAS-No.	Concentration (% w/w)
alpha-tert-butyl-beta-(4-chlorophenoxy)-1H-1,2,4-triazole-1-ethanol	55219-65-3	>= 10 - < 30
alpha-cyano-3-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate	52315-07-8	< 10

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

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- Consult a physician.
Show this safety data sheet to the doctor in attendance.
For advice, contact a Poisons Information Centre (Phone: Australia 131 126 or New Zealand 0800 764 766) or a doctor at once.
- If inhaled : Move to fresh air.
Consult a physician after significant exposure.
- In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
- In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
Obtain medical attention.
- Most important symptoms and effects, both acute and delayed : Symptoms may be delayed.
Harmful if swallowed.
Suspected of damaging fertility.
- Notes to physician : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.
-

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.
- 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 : In the event of fire, wear self-contained breathing apparatus.
-

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
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- 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 : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.
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SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : Avoid exceeding the given occupational exposure limits (see section 8). For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. 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 The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Before removing gloves clean them with soap and water.
- Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles

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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 : suspension

Colour : green

Odour : slight, characteristic

Odour Threshold : No data available

pH : 6.0 - 8.0

: No data available

: No data available

Flash point : > 100 °C

Evaporation rate : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : 1.072 (20 °C)

Solubility(ies)

 Water solubility : completely soluble

 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

SECTION 10. STABILITY AND REACTIVITY

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Reactivity : Stable under recommended storage conditions.

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

Possibility of hazardous reactions : Stable under recommended storage conditions.
No decomposition if used as directed.

Conditions to avoid : No data available

Hazardous decomposition products : Burning produces noxious and toxic fumes.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate: 500 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Components:

alpha-tert-butyl-beta-(4-chlorophenoxy)-1H-1,2,4-triazole-1-ethanol:

Acute oral toxicity : LD50 (Rat): 689 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 954 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The component/mixture is low toxic after short term inhalation.

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg

alpha-cyano-3-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate:

Acute oral toxicity : LD50 (Rat): 287 mg/kg
GLP: yes

Acute inhalation toxicity : LC50 (Rat): 3.28 mg/l
Test atmosphere: dust/mist
GLP: yes

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
GLP: yes

Skin corrosion/irritation

Product:

Remarks: According to the classification criteria of the European Union, the product is not con-

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sidered as being a skin irritant.

Components:

alpha-tert-butyl-beta-(4-chlorophenoxy)-1H-1,2,4-triazole-1-ethanol:

Species: Rabbit

Assessment: No skin irritation

alpha-cyano-3-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate:

Species: Rabbit

Result: No skin irritation

GLP: yes

Serious eye damage/eye irritation

Product:

Remarks: According to the classification criteria of the European Union, the product is not considered as being an eye irritant.

Components:

alpha-cyano-3-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate:

Species: Rabbit

Result: No eye irritation

GLP: yes

Respiratory or skin sensitisation

Product:

Remarks: No data available

Components:

alpha-cyano-3-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate:

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

GLP: yes

Chronic toxicity

Germ cell mutagenicity

Components:

alpha-tert-butyl-beta-(4-chlorophenoxy)-1H-1,2,4-triazole-1-ethanol:

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

Assessment

alpha-cyano-3-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate:

Germ cell mutagenicity - : negative

Assessment

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Carcinogenicity

Components:

alpha-tert-butyl-beta-(4-chlorophenoxy)-1H-1,2,4-triazole-1-ethanol:

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

alpha-cyano-3-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate:

Carcinogenicity - Assessment : negative

Reproductive toxicity

Components:

alpha-tert-butyl-beta-(4-chlorophenoxy)-1H-1,2,4-triazole-1-ethanol:

Reproductive toxicity - Assessment : Animal testing did not show any effects on fertility.

alpha-cyano-3-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate:

Effects on fertility : General Toxicity - Parent: No observed adverse effect level: 10 mg/kg bw/day

Effects on foetal development : Teratogenicity: No observed adverse effect level: 70 mg/kg bw/day

Repeated dose toxicity

Components:

alpha-cyano-3-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate:

Species: Dog

NOAEL: 500 ppm (12.5 mg/kg bw/d)

Exposure time: 90 d

GLP: yes

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

alpha-cyano-3-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate:

Toxicity to fish : LC50 (Salmo gairdneri): 0.0028 mg/l
Exposure time: 96 h
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.0003 mg/l
Exposure time: 48 h

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GLP: yes

Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): > 0.1 mg/l

M-Factor (Acute aquatic toxicity) : 1,000

Toxicity to fish (Chronic toxicity) : NOEC (Pimephales promelas (fathead minnow)): 0.00003 mg/l

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.00004 mg/l
Exposure time: 21 d

M-Factor (Chronic aquatic toxicity) : 1,000

Persistence and degradability

Components:

alpha-cyano-3-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate:

Biodegradability : Result: Not readily biodegradable.

Stability in water : Hydrolysis: at 25 °C (> 100 d)

Photodegradation :

Bioaccumulative potential

No data available

Mobility in soil

Components:

alpha-cyano-3-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate:

Stability in soil : Soil temperature: 21 °C
Remarks: cis isomer

Soil temperature: 21 °C
Remarks: trans isomer

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

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Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulation

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

National Regulations

ADG

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

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

Standard for the Uniform : Schedule 6
Scheduling of Medicines and
Poisons

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

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(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 - 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 Co-operation 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

Europe:	All European Countries	+44 (0) 1235 239 670 (NCEC)
Asia Pacific:	East / South East Asia – Regional Number	+65 3158 1074
	Australia	+61 2801 44558

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Country: AU
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	Mexico	+52 555 004 8763
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