

# SAFETY DATA SHEET

## RANCONA PINNACLE

Version      Revision Date:      MSDS Number:      Country: US  
1.12          10/20/2015          400000001099      Language: EN

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### SECTION 1. IDENTIFICATION

Product name                      : RANCONA PINNACLE

Product code                      : 400000001099

#### Manufacturer or supplier's details

Company:                              MacDermid Agricultural Solutions, Inc  
   245 Freight St  
   Waterbury, CT  
   United States of America  
   06702  
   Telephone : +1 800 423 8569

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:      Agriphar Crop Solutions: +1 800 423 8569(24 hours) 800-424-9300  
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

Restrictions on use                    : Agriculture, For professional users only.

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### SECTION 2. HAZARDS IDENTIFICATION

#### GHS Classification

Acute toxicity (Inhalation)          : Category 4

Eye irritation                              : Category 2B

Reproductive toxicity                 : Category 2

Acute aquatic toxicity                 : Category 3

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Chronic aquatic toxicity : Category 1

### GHS Label element

Hazard pictograms :



Signal word : Warning

Hazard statements : H320 Causes eye irritation.  
H332 Harmful if inhaled.  
H361 Suspected of damaging fertility or the unborn child.  
H402 Harmful to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P391 Collect spillage.  
**Storage:**  
P405 Store locked up.  
**Disposal:**  
P501 Dispose of contents/ container to an approved waste disposal plant.

### Other hazards

None known.

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Iaconazole - 0.0385 lbs/gal

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Metalaxyl - 0.051 lbs/gal

Ipconazole - 4.61 gm/L

Metalaxyl - 6.12 gm/L

### Hazardous components

Chemical Name	CAS-No.	Concentration (% w/w)
ethane-1,2-diol	107-21-1	>= 20 - < 30
gamma-butyrolactone	96-48-0	>= 1 - < 5
metalaxyl	57837-19-1	>= 0.1 - < 1
Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-	125225-28-7	>= 0.1 - < 1

### SECTION 4. FIRST AID MEASURES

- If inhaled : Remove to fresh air.  
Obtain medical attention.
- In case of skin contact : Remove contaminated clothing and shoes.  
Wash off with warm water and soap.  
If symptoms persist, call a physician.
- In case of eye contact : In case of contact, immediately flush eyes with plenty of water  
for at least 15 minutes.  
If symptoms persist, call a physician.
- If swallowed : Do NOT induce vomiting.  
Do NOT induce vomiting.  
Rinse mouth with water.  
Obtain medical attention.
- Most important symptoms and effects, both acute and delayed : irritant effects  
Symptoms may be delayed.  
Causes eye irritation.  
Harmful if inhaled.  
Suspected of damaging fertility or the unborn child.
- 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 : Extinguishing media - large fires  
Alcohol-resistant foam  
(on small fires)  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : Water spray jet

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- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Prevent fire extinguishing water from contaminating surface water or the ground water system.
- 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 : Evacuate unnecessary personnel.  
Avoid all contact with material.  
Wear suitable protective equipment.
- Environmental precautions : Prevent leaks and prevent soil / water pollution caused by leaks.
- Methods and materials for containment and cleaning up : Absorb on inert material such as sand, earth, vermiculite.  
Collect for disposal.  
Dam up.  
Large spills should be collected mechanically (remove by pumping) for disposal.  
Pump excess material into suitable container (metal drums, metal tank, or such).  
  
In accordance with local and national regulations.

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### SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Wear suitable protective equipment.  
Keep container tightly closed.
- Conditions for safe storage : Keep in a dry, cool place.

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### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
ethane-1,2-diol	107-21-1	C	50 ppm 125 mg/m <sup>3</sup>	OSHA P0
		C	100 mg/m <sup>3</sup>	ACGIH
		C (Aerosol only)	100 mg/m <sup>3</sup>	ACGIH

#### Hazardous components without workplace control parameters

Components	CAS-No.
gamma-butyrolactone	96-48-0

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metalaxyl	57837-19-1
Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-	125225-28-7

### Personal protective equipment

- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Hand protection
- Remarks : Impervious gloves
- Eye protection : Face-shield
- Skin and body protection : Impervious clothing
- Hygiene measures : NOTE TO END-USERS: The employee protection recommendations on this SDS may differ from those on the product label. For normal use of this product, always refer to the personal protective equipment requirements on the product label.

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : red
- Odour : No information available.
- Odour Threshold : No data available
- pH : 5.5 - 7.5
- : No data available
- : No data available
- Flash point : No data available
- 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 : 1.062 (25 °C)

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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 : 30 - 100 mPa.s  
Viscosity, kinematic : No data available  
Self-Accelerating decomposition temperature (SADT) : Method: No information available.

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### SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable under recommended storage conditions.  
Chemical stability : No decomposition if stored and applied as directed.  
Conditions to avoid : None known.  
Incompatible materials : None known.  
Hazardous decomposition products : Thermal decomposition can lead to release of irritating gases and vapours.

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### SECTION 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

##### Product:

Acute oral toxicity : LD50 (Rat, female): > 5,000 mg/kg  
GLP: yes  
Acute inhalation toxicity : LC50 (Rat): > 2.58 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
GLP: yes  
Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg  
GLP: yes

##### Components:

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### **ethane-1,2-diol:**

Acute oral toxicity : LD50 (Rat, female): 4,700 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 10,670 mg/kg

### **gamma-butyrolactone:**

Acute oral toxicity : LD50 (Rat): 1,540 mg/kg

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

### **Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:**

Acute oral toxicity : LD50 (Rat, male): 1,338 mg/kg  
Method: OECD Test Guideline 401  
GLP: yes

LD50 (Rat, female): 888 mg/kg  
Method: OECD Test Guideline 401  
GLP: yes

LD50 (Mouse, male): 537 mg/kg  
Method: OECD Test Guideline 401  
GLP: yes

LD50 (Mouse, female): 468 mg/kg  
Method: OECD Test Guideline 401  
GLP: yes

Acute inhalation toxicity : LC50 (Rat, male and female): > 1.88 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
GLP: yes

LC50 (Rat, male and female): > 3.53 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
GLP: yes

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes

### **Skin corrosion/irritation**

#### **Product:**

Species: Rabbit  
Result: slight irritation  
GLP: yes

#### **Components:**

##### **gamma-butyrolactone:**

Species: Rabbit

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Result: No skin irritation

**Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:**

Species: Rabbit

Exposure time: 4 h

Result: No skin irritation

GLP: yes

**Serious eye damage/eye irritation**

**Product:**

Species: Rabbit

Result: Mild eye irritation

GLP: yes

**Components:**

**gamma-butyrolactone:**

Species: Rabbit

Result: Eye irritation

Method: Draize Test

**Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:**

Species: Rabbit

Result: No eye irritation

**Respiratory or skin sensitisation**

**Product:**

Species: Guinea pig

Method: Buehler Test

Result: Did not cause sensitisation on laboratory animals.

**Components:**

**Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:**

Species: Guinea pig

Method: Magnusson-Kligmann-Test

Result: Did not cause sensitisation on laboratory animals.

GLP: yes

**Germ cell mutagenicity**

**Components:**

**gamma-butyrolactone:**

Genotoxicity in vitro

: Test Type: in vitro assay

Metabolic activation: with and without metabolic activation

Result: positive

: Test Type: Chromosome aberration test in vitro

Result: positive

: Test Type: Ames test



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Metabolic activation: with and without metabolic activation  
Result: negative

: Test Type: Unscheduled DNA synthesis (UDS)  
Metabolic activation: with and without metabolic activation  
Result: negative

Genotoxicity in vivo : Test Type: in vivo assay  
Species: Mouse (male)  
Result: negative

Test Type: In vivo micronucleus test  
Species: Mouse (male and female)  
Result: negative

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

**Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:**

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

: Test Type: In Vitro mammalian Cell Gene Mutation Test  
Metabolic activation: with and without metabolic activation  
Result: negative

: Test Type: Chromosome aberration test in vitro  
Metabolic activation: with and without metabolic activation  
Result: negative

Genotoxicity in vivo : Species: Mouse  
Cell type: Bone marrow  
Result: negative

Germ cell mutagenicity - Assessment : In vitro tests did not show mutagenic effects

### Carcinogenicity

**Components:**

**gamma-butyrolactone:**

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

**Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:**

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

### IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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**OSHA**      No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**      No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### Reproductive toxicity

#### Components:

##### **gamma-butyrolactone:**

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

##### **Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:**

Effects on fertility      : Species: Rat  
Dose: 0, 30, 100 or 300 ppm  
General Toxicity F1: No observed adverse effect level: 9 - 10 mg/kg bw/day

### STOT - single exposure

#### Product:

Remarks: No data available

### STOT - repeated exposure

#### Components:

##### **gamma-butyrolactone:**

Exposure routes: Oral  
Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

##### **Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:**

Target Organs: Eyes  
Assessment: May cause damage to organs through prolonged or repeated exposure.

### Repeated dose toxicity

#### Components:

##### **Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:**

Species: Rat, female  
NOAEL: 7 mg/kg  
LOAEL: 33.2 mg/kg  
Application Route: Oral  
Exposure time: 13 weeks  
Dose: 3.1, 7.0, 15.4 and 33.2 mg/kg  
GLP: yes  
Target Organs: Adrenal gland, thymus gland

Species: Rat, male

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NOAEL: 25.9 mg/kg  
LOAEL: 52.2 mg/kg  
Application Route: Oral  
Exposure time: 13 weeks  
Dose: 2.5, 5.8, 12.6, 25.9 and 52.2  
GLP: yes  
Target Organs: Adrenal gland, thymus gland

Species: Rat, male and female  
NOAEL: 10 mg/kg  
LOAEL: 40 mg/kg  
Application Route: Dermal  
Exposure time: 13 weeks  
Dose: 0, 2, 10 or 40 mg/kg bw/day  
GLP: yes

Species: Rat, male and female  
NOAEL: 30 mg/kg  
LOAEL: 100 mg/kg  
Application Route: Inhalation  
Exposure time: 28-day  
Dose: 0, 30, 100, 300 or 1000 mg/m<sup>3</sup>  
GLP: yes

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### SECTION 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

##### Components:

##### **gamma-butyrolactone:**

- Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 220 - 460 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: DIN 38412
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 500 mg/l  
Exposure time: 48 h
- Toxicity to algae : EC50 (Desmodesmus subspicatus (Scenedesmus subspicatus)): 79 mg/l  
Exposure time: 96 h

##### **Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:**

- Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 1.3 mg/l  
Exposure time: 96 h  
Test Type: flow-through test
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.7 mg/l  
Exposure time: 48 h  
GLP: yes
- Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 0.62
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mg/l  
Exposure time: 72 h  
GLP: yes

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : NOEC (Pimephales promelas (fathead minnow)): 0.00044 mg/l  
Exposure time: 28 d  
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.0109 mg/l  
Exposure time: 21 d  
GLP: yes

M-Factor (Chronic aquatic toxicity) : 100

### Persistence and degradability

#### Components:

##### **gamma-butyrolactone:**

Biodegradability : aerobic  
Inoculum: activated sludge  
Concentration: 100 mg/l  
Result: Readily biodegradable  
Biodegradation: 62 - 90 %  
Exposure time: 14 d

### Bioaccumulative potential

#### Components:

##### **ethane-1,2-diol:**

Partition coefficient: n-octanol/water : log Pow: -1.3

##### **gamma-butyrolactone:**

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n-octanol/water : log Pow: -0.566  
Method: OECD Test Guideline 107

##### **Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:**

Partition coefficient: n-octanol/water : log Pow: 4.28 - 4.49

### Mobility in soil

No data available

### Other adverse effects

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Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances  
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : The product itself has not been tested.  
The following information is applicable to a component of this material:

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### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

Waste from residues : In accordance with local and national regulations.

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### 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

##### 49 CFR

Not regulated as a dangerous good

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### SECTION 15. REGULATORY INFORMATION

#### EPCRA - Emergency Planning and Community Right-to-Know Act

##### CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Component RQ (lbs)
Ethylene glycol	107-21-1	5000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

##### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

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**SSARA 311/312 Hazards** : Acute Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

ethane-1,2-diol	107-21-1	22.4674 %
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### Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

ethane-1,2-diol	107-21-1	22.4674 %
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This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489):

ethane-1,2-diol	107-21-1	22.4674 %
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### Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

**California Prop. 65**      This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

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### FIFRA Hazard Information:

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The pesticide label also includes other important information, including directions for use.

The hazard information required on the pesticide label is reproduced below.

CAUTION

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Causes moderate eye irritation. Avoid contact with eyes or clothing.

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate or by disposal of wastes.

Metalaxyl is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional office of the EPA.

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### SECTION 16. OTHER INFORMATION

#### Full text of other abbreviations

(Q)SAR - (Quantitative) Structure Activity Relationship; ASTM - American Society for the Testing of Materials; bw - Body weight; DIN - Standard of the German Institute for Standardisation; EC<sub>x</sub> - Concentration associated with x% response; EL<sub>x</sub> - Loading rate associated with x% response; EmS - Emergency Schedule; ErC<sub>x</sub> - Concentration associated with x% growth rate response; 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; IC<sub>50</sub> - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC<sub>50</sub> - Lethal Concentration to 50 % of a test population; LD<sub>50</sub> - 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; 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; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; DOT - Department of Transportation; EHS - Extremely Hazardous Substance; HMIS - Hazardous Materials Identification System; MSHA - Mine Safety and Health Administration; NFPA - National Fire Protection Association; RCRA - Resource Conservation and Recovery Act; RQ - Reportable Quantity; SARA - Superfund Amendments and Reauthorization Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice; ERG - Emergency Response Guide; NTP - National Toxicology Program; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods

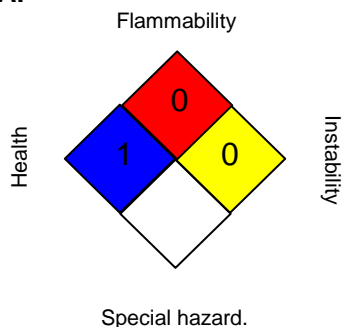
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### Further information

#### NFPA:



#### HMIS III:

HEALTH	1*
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

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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.

US / EN

### Carechem24 International Worldwide Coverage

#### Emergency Phone Number

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	China	+86 532 8388 9090
	China Taiwan	+86 10 5100 3039
	Japan	+81 345 789 341
	Indonesia	00780 3011 0293
	Malaysia	+60 3 6207 4347
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	Korea	+65 3158 1285 +82 (0)234 798 401
	Vietnam	+65 3158 1255
	India	+65 3158 1198 0800 100 7479



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<u>Middle East / Africa:</u>	Arabic speaking countries	+44 (0) 1235 239 671
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<u>Latin America:</u>	Brazil	+55 11 3197 5891
	Mexico	+52 555 004 8763
	Chile	+56 225 829 336
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