

## 1 Identification

**Product Name:** FARMALINX ETHON 480 TURF GROWTH REGULATOR

**Other Means of Identification:** Mixture

**Recommended Use of the Chemical and Restriction on Use:** Turf growth regulator

**Details of Manufacturer or Importer:**

Farmalinx  
Suite 2506, Level 25, Tower 2,  
101 Grafton Street,  
Bondi Junction NSW 2022

**Phone Number:** 02 9389 2455

**Emergency telephone number:** National Poison Information Centre: 13 11 26

## 2 Hazard(s) Identification

**Hazardous Nature:**

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



corrosion

Skin Corrosion/Irritation 1C      H314 Causes severe skin burns and eye damage.

Serious Eye Damage/Irritation 1      H318 Causes serious eye damage.



environment

Aquatic Chronic 2      H411 Toxic to aquatic life with long lasting effects.

Aquatic Acute 2      H401 Toxic to aquatic life.

**Signal Word** Danger

**Hazard Statements**

H314 Causes severe skin burns and eye damage.

H411 Toxic to aquatic life with long lasting effects.

**Precautionary Statements**

P260 Do not breathe dusts or mists.

P264 Wash hands thoroughly after handling.

P273 Avoid release to the environment.

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

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

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P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national regulations.

### 3 Composition and Information on Ingredients

**Chemical Characterization: Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.**Hazardous Components:**

CAS: 16672-87-0	2-chloroethylphosphonic acid	48%

### 4 First Aid Measures

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

**Skin Contact:**

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap for at least 20 minutes. Seek medical attention if symptoms occur.

**Eye Contact:**

In case of eye contact, hold eyelids open and rinse with water for at least 20 - 30 minutes. Seek medical attention if symptoms occur.

**Ingestion:**

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

**Symptoms Caused by Exposure:**

Inhalation: May be harmful if inhaled. May cause respiratory irritation or burns.

Skin Contact: Toxic in contact with skin. Causes severe skin burns, blisters and redness.

Eye Contact: Causes serious eye damage and possible blindness.

Ingestion: May be harmful if swallowed. May cause burns to the gastrointestinal system.

### 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Water fog, foam, dry chemical or carbon dioxide.

**Specific Hazards Arising from the Chemical:**

Hazardous combustion products include oxides of carbon and phosphorus, other phosphorus compounds, hydrogen chloride gas, other chlorine compounds, hydrogen gas and smoke.

This product is not flammable, but may burn or decompose in a fire. Reacts violently with bases generating heat. Contact with metals may release flammable hydrogen gas.

Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

**Special Protective Equipment and Precautions for Fire Fighters:**

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

### 6 Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:**

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.

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**Environmental Precautions:**

In the event of a major spill, prevent spillage from entering drains or water courses.

**Methods and Materials for Containment and Cleaning Up:**

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal. Wash spill area with plenty of water.

## 7 Handling and Storage

**Precautions for Safe Handling:**

Reacts violently with bases generating heat.

Contact with metals may release flammable hydrogen gas.

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

Food, beverages and tobacco products should not be stored or consumed where this material is in use.

Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

**Conditions for Safe Storage:**

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from heat.

Keep below 30°C. Keep away from strong bases, strong oxidising agents, zinc, iron, copper, mild steel, aluminium and sodium chlorate.

## 8 Exposure Controls and Personal Protection

**Exposure Standards:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Engineering Controls:** Ensure adequate ventilation of the working area.

**Respiratory Protection:**

Respiratory protection is not required under normal use conditions.

Use an approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

**Skin Protection:**

Impermeable gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

**Eye and Face Protection:**

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

## 9 Physical and Chemical Properties

**Appearance:****Form:**

Liquid

**Colour:**

Clear

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<b>Odour:</b>	Characteristic
<b>Odour Threshold:</b>	No information available
<b>pH-Value:</b>	0.8
<b>Melting point/freezing point:</b>	<0 °C
<b>Initial Boiling Point/Boiling Range:</b>	~100 °C
<b>Flash Point:</b>	Not applicable
<b>Flammability:</b>	Product is not flammable.
<b>Auto-ignition Temperature:</b>	Not applicable
<b>Decomposition Temperature:</b>	No information available
<b>Explosion Limits:</b>	
<b>Lower:</b>	Not applicable
<b>Upper:</b>	Not applicable
<b>Vapour Pressure at 20 °C:</b>	2.37 kPa (Water vapour pressure)
<b>Relative Density at 20 °C:</b>	1.302
<b>Vapour Density:</b>	As for water.
<b>Evaporation Rate:</b>	No information available
<b>Solubility in Water:</b>	Soluble
<b>Partition Coefficient (n-octanol/water) at 25 °C:</b>	<-2.2 log POW

## 10 Stability and Reactivity

**Possibility of Hazardous Reactions:**

Hazardous polymerisation will not occur.  
 Reacts violently with bases generating heat.  
 Contact with metals may release flammable hydrogen gas.

**Chemical Stability:** Stable at ambient temperature and under normal conditions of use.

**Conditions to Avoid:** Heat.

**Incompatible Materials:**

Strong bases, strong oxidising agents, zinc, iron, copper, mild steel, aluminium and sodium chlorate.

**Hazardous Decomposition Products:**

Oxides of carbon and phosphorus, other phosphorus compounds, hydrogen chloride gas, other chlorine compounds, hydrogen gas and smoke.

## 11 Toxicological Information

**Toxicity:****LD<sub>50</sub>/LC<sub>50</sub> Values Relevant for Classification:**

**CAS: 16672-87-0 2-chloroethylphosphonic acid**

Oral	LD <sub>50</sub>	1,600 ml/kg (rat)
Dermal	LD <sub>50</sub>	>5,000 mg/kg (rabbit)

**Acute Health Effects**

**Inhalation:** May be harmful if inhaled. May cause respiratory irritation or burns.

**Skin:** Toxic in contact with skin. Causes severe skin burns, blisters and redness.

**Eye:** Causes serious eye damage and possible blindness.

**Ingestion:** May be harmful if swallowed. May cause burns to the gastrointestinal system.

**Skin Corrosion / Irritation:** Causes severe skin burns.

**Serious Eye Damage / Irritation:** Causes serious eye damage.

**Respiratory or Skin Sensitisation:** Based on classification principles, the classification criteria are not met.

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**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:** This product does NOT contain any IARC listed chemicals.**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.**Specific Target Organ Toxicity (STOT) - Single Exposure:**

Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**

Based on classification principles, the classification criteria are not met.

**Aspiration Hazard:** Based on classification principles, the classification criteria are not met.**Chronic Health Effects:** No information available**Existing Conditions Aggravated by Exposure:** No information available**Additional toxicological information:**

The Australian Acceptable Daily Intake (ADI) for ethephon for a human is 0.02 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 0.17 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species.

(Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2020).

## 12 Ecological Information

**Ecotoxicity:**

Slightly toxic to birds.

LD50 1072 mg/kg (Bobwhite quail)

**Aquatic toxicity:**

Toxic to aquatic life with long lasting effects.

**CAS: 16672-87-0 2-chloroethylphosphonic acid**

EC <sub>50</sub>	>721 mg/l (daphnia)
	56 mg/l (scenedesmus subspicatus)
LC <sub>50</sub> /96 h	>100 mg/l (rainbow trout)
LC <sub>50</sub>	29 mg/l (green algae)
	>100 mg/l (rainbow trout)

**Persistence and Degradability:** Ethephon is rapidly degraded in soil and is sensitive to UV light.**Bioaccumulative Potential:** No further relevant information available.**Mobility in Soil:** This product is unlikely to be mobile in soils.**Other adverse effects:** No further relevant information available.

## 13 Disposal Considerations

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

## 14 Transport Information

**UN Number**  
ADG, IMDG, IATA

UN3265

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**Proper Shipping Name****ADG**

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2-chloroethylphosphonic acid), ENVIRONMENTALLY HAZARDOUS

**IMDG, IATA**

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2-chloroethylphosphonic acid)

**Dangerous Goods Class****ADG Class:**

8 Corrosive substances.

**Packing Group:****ADG, IMDG, IATA**

III

**EMS Number:**

F-A,S-B

**Hazchem Code:**

2X

**Special Provisions:**

223, 274

**Limited Quantities:**

5 L

**Packagings & IBCs - Packing Instruction:**

P001, IBC03, LP01

**Portable Tanks & Bulk Containers - Instructions:** T7**Portable Tanks & Bulk Containers - Special Provisions:**

TP1, TP28

**15 Regulatory Information****Australian Inventory of Chemical Substances:**

CAS: 16672-87-0 2-chloroethylphosphonic acid

CAS: 7732-18-5 Water

**Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:**

Poisons Schedule: 6

**16 Other Information****Date of Preparation or Last Revision:** 21.01.2020**Prepared by:** MSDS.COM.AU Pty Ltd[www.msds.com.au](http://www.msds.com.au)**Abbreviations and acronyms:**

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC<sub>50</sub>: Lethal concentration, 50 percentLD<sub>50</sub>: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Acute Toxicity (Dermal) 3: Acute toxicity – Category 3

Acute Toxicity (Inhalation) 4: Acute toxicity – Category 4

Skin Corrosion/Irritation 1C: Skin corrosion/irritation – Category 1C

Serious Eye Damage/Irritation 1: Serious eye damage/eye irritation – Category 1

Aquatic Acute 2: Hazardous to the aquatic environment, short-term (Acute). Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment, long-term (Chronic). Category 2

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**Disclaimer**

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016"

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