



1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name:	EuroChem Ethephon 720 Growth Regulator
Other means of identification:	Not Applicable
Recommended use of the chemical and restrictions on use:	Plant growth regulator for use as described on the product label. Ethephon is an ethylene generator - a phosphonic acid derivative.
Supplier:	Eurochem Pty Ltd
Street address:	9 Heales Rd, Lara, VIC 3212
Telephone no.:	+61 427 453 101
Fax:	Not Available
Website:	www.eurochem.com.au
Emergency telephone:	Poisons Information Centre 13 11 26 (24 hours)

2. HAZARDS IDENTIFICATION

Classification of the substance mixture: This material is classified as hazardous according to the classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

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

Classification of the substance or mixture:

Acute Toxicity (Oral) Category 4
Acute Toxicity (Dermal) Category 3
Skin Irritation Category 1
Acute Toxicity (Inhalation) Category 4
Hazardous to Aquatic Environment Chronic Category 2

SIGNAL WORD: DANGER

Hazard Statement(s):

H302 Harmful if swallowed.
H311: Toxic in contact with skin
H314: Causes severe skin burns and eye damage.
H332: Harmful if inhaled.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statement(s):

Prevention:

P102: Keep out of reach of children.
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
P261: Avoid breathing fumes, mists, vapours or spray.
P262: Do not get in eyes, on skin, or on clothing.
P264: Wash contacted areas thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P273: Avoid release to the environment.
P280: Wear protective gloves, protective clothing and eye or face protection.

Response:

P362: Take off contaminated clothing and wash before reuse.
P301+P312: IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P308+P313: If exposed or concerned: Get medical advice.
P332+P313: If skin irritation occurs: Get medical advice.
P337+P313: If eye irritation persists: Get medical advice.
P391: Collect spillage.
P370+P378: In case of fire, use carbon dioxide, dry chemical, foam, water fog. Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal foam can be used.

Storage:

P405: Store locked up.
P410: Protect from sunlight.
P402+P404: Store in a dry place. Store in a closed container.
P403+P235: Store in a well-ventilated place. Keep cool.

Disposal:

P501 Dispose of contents/container in accordance with national regulations.

PICTOGRAM:



3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion (w/v)
Ethephon	16672-87-0	720g/L
Other nonhazardous ingredients	Various	Balance

4. FIRST AID MEASURES

If poisoning occurs, contact a Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766 or a doctor. Have this SDS or the label with you.

Inhalation: Remove the victim to fresh air. Apply artificial respiration. Seek medical attention immediately.

Skin contact: Remove contaminated clothing and wash with plenty of water and soap. If symptoms develop, seek medical attention.

Eye contact: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes. Seek medical advice. Take special care if exposed person is wearing contact lenses.

Ingestion: If swallowed, wash mouth with water and contact a Poisons Information Centre or call a doctor. Do not induce vomiting.



First aid facilities: Eyewash and normal washroom facilities.
Medical attention and special treatment needed: Treat Symptomatically

5. FIRE FIGHTING MEASURES

Suitable extinguishing media:	In case of fire, use carbon dioxide, dry chemical, foam, water fog. Do not use full water jet.
Specific hazards arising from the substance or mixture:	Fire decomposition products from this product may be toxic if inhaled; do not inhale gases/smoke. Take appropriate protective measures.
Special protective equipment and precautions for fire-fighters:	In case of fire and/or explosion do not breathe fumes. Cool containers at risk with water spray jet. If possible, remove containers from endangered area. Wear self-contained breathing apparatus and chemical-protective clothing. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately. Do not allow contaminated water to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/ Environmental precautions:	In the event of a spill, prevent spillage from entering drains or water courses with absorbent material and call emergency services.
Personal precautions/ Protective equipment:	Wear full protective clothing including eye/face protection. All skin areas should be covered. It is good practice to wear impermeable gloves when handling chemical products. Provide adequate ventilation. If there is a significant chance that vapours or mists are likely to build up in the clean-up area, we recommend that you use a respirator. Refer to protective equipment as described in Section 8 of this safety data sheet.
Methods and materials for containment and cleaning up:	Contain - prevent run off into drains and waterways. Stop leak if safe to do so and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Because of the environmentally hazardous nature of this product, special care should be taken to restrict release to waterways or drains. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage and dispose of promptly. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this SDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

7. HANDLING AND STORAGE

Precautions for safe handling:	Ensure adequate ventilation. Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Keep containers closed at all times - check regularly for leaks or spills. Transport and store upright. Refer to Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under 'Storage' should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.
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Conditions for safe storage, including any incompatibilities:

Store packages of this product in a cool place. Protect from open fire, heat and direct sunlight. Keep away from food, drink and animal feeding stuffs. Keep away from sources of ignition - No smoking. Keep in a cool, dry and well-ventilated place. Make sure that containers of this product are kept tightly closed. Keep containers dry and away from water. Make sure that the product does not come into contact with substances listed under 'Incompatibilities' in Section 10. Check packaging - there may be further storage instructions on the label.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters: No exposure controls are assigned to the product or ingredients by Safe Work Australia.

Appropriate engineering controls: Use in well ventilated areas. If natural ventilation is inadequate, use of a fan is suggested. Keep containers closed when not in use. Do not breathe vapours/aerosols. Use good personal hygiene practices-wash hands at breaks and when done working with material. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes.

Individual protection measures, such as Personal Protective Equipment (PPE):

See container label safety directions. The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

Observe good standards of hygiene and cleanliness. Always wash hands, arms and face thoroughly with soap and water before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment with detergent and warm water before storage or re-use.

Respiratory protection: Respiratory protective equipment is not needed under normal and intended conditions of product use. However, if protection is required, Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387) and consult AS/NZS 1715 and AS/NZS 1716 for further information.

Eye and face protection: Avoid contact with eyes. Eye and face protection is not needed under normal and intended conditions of product use, however safety glasses with side protection should be worn as a general precaution. If protection is required consult AS/NZS 1336 and AS/NZS 1337 for further information. Consult AS/NZS 1336 and AS/NZS 1337 for further information. Safety glasses with side protection (EN 166)

Skin protection: Avoid contact with skin. Elbow-length rubber or chemical resistant gloves must be worn when opening the container and using the product. Always check with the glove manufacturer or your personal protective equipment supplier regarding the correct type of glove to use. Consult AS/NZS 2161 for further information. Trousers, long sleeved shirt /cotton overalls buttoned to the neck and wrist and closed in shoes or safety footwear should also be worn as a general precaution. Consult AS/NZS 2210 and AS/NZS 2919 for further information. People with high-risk exposure, chemical suits (EN ISO 6530:2005) and boots may be required (EN ISO 20345:2012).

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Colour:	Clear colorless to pale yellow
Odour:	Mild, characteristic pungent odour.
pH:	<2 , not Corrosive
Specific gravity:	1.294 at 20°C
Melting point/Freezing point:	Not determined
Boiling point/range:	Approximately 100°C at 100kPa
Flash point:	Not determined
Upper Flammability Limit:	Not determined
Lower Flammability Limit:	Not determined
Evaporation point:	Not determined
Vapour pressure:	Not determined
Vapour density:	Not determined



Solubility:	Soluble
Partition coefficient: n- octanol/water	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	Not determined

10. STABILITY AND REACTIVITY

Reactivity:	This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf-life properties.
Chemical stability:	Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous reactions:	The product is stable under recommended storage and handling conditions
Conditions to avoid:	Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.
Incompatible materials:	None known.
Hazardous decomposition products:	Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours dangerous for health are spread.

11. TOXICOLOGICAL INFORMATION

Toxicity: The LD50 of Ethephon in rats ranged from 3400 mg/kg to 4229 mg/kg. Acute animal toxicity studies in a few species show that via the oral and dermal routes, Ethephon is relatively non-toxic except in hens. An acute study with rats showed an oral LD50 of 1.6 g/kg (EPA toxicity category III). An acute dermal study using rabbits showed a dermal LD50 of greater than 5 g/kg (EPA toxicity category III). In a rat study, Ethephon was administered by gavage for 13 weeks to 20 rats per sex per dose level at 0, 50, 100, and 200 mg/kg/day. Plasma cholinesterase and brain cholinesterase activity were found to be different from the controls at all dose levels. However, red blood cell cholinesterase activity did not differ from the controls in either sex of any dose group. The acute oral LD50 of 24% Ethephon solution in propylene glycol for rats was reported to range between 3,400 mg/kg (RTECS, 1985) to 4,229 mg/kg. The dermal LD50 for the same 24% solution for rabbits was 5,730 mg/kg. Irritation of mucous membranes in rabbits was also reported. The same study indicated that the inhalation LC50 for rats was greater than 5 mg/l of air. EPA reported the acute oral LD50 to be 1.6 g/kg for rats; the acute dermal LD50 for rabbits to be greater than 5 g/kg; and the primary skin irritation score for rabbits to be 6.75 (corrosive). The oral LD50 for mice fed technical Ethephon was 2850 mg/kg; 5,000 mg/kg for rabbits; 4,200 mg/kg for guinea pigs; and an unreported 4,200 mg/kg for mammals. In a dog study, Ethephon was administered in the food to 4 dogs per sex per dose level at 0, 5.0, 25.0, or 187.5 mg/kg/day for 13 weeks. Plasma cholinesterase activity was depressed in both males and females at all dose levels. Red blood cell activity was depressed in the males (at all dose levels except 5.0 mg/kg/day at 8 weeks) and at the 25.0 and 187.5 mg/kg/day dose levels in the females. Brain cholinesterase activity was significant only in females dosed at 187.5 mg/kg/day.

Chronic Toxicity: A chronic toxicity/oncogenicity study using Swiss albino mice included 85 mice fed diets containing 0, 4.5, 45, or 150 mg/kg/day of Ethephon for 78 weeks. Inhibition of plasma cholinesterase activity was significant at the 45 and 150 mg/kg/day dose levels in males and females. The No Observable Effect Level (NOEL) for plasma cholinesterase activity is 4.5 mg/kg/day for both sexes and the Lowest Effect Level for this effect was 45 mg/kg/day for both sexes. There appeared to be a dose-related decrease in red blood cell cholinesterase activity in females. There was significant depression in RBC cholinesterase activity at the 45 and 150 mg/kg/day dose levels, while females in the 4.5 mg/kg/day dose groups exhibited depression in RBC cholinesterase activity at 52 weeks and 78 weeks, which was not considered statistically significant. Because of the apparent dose-related decrease in RBC cholinesterase activity in females in the 4.5 mg/kg/day dose group, the NOEL for this effect in females is considered to be below 4.5 mg/kg/day, the lowest dose tested. RBC cholinesterase activity was nominally decreased in males at the mid- and high-dose groups. Brain cholinesterase activity was not different from control values at any dose level in males or females. In two-year feeding studies, rats receiving greater than or equal to 12,500 mg/kg diet

showed no ill effect except at top dose levels toward the end of the trial. The highest dose without adverse effects reported in rats was 375 mg/kg/day for 90 days.

Reproductive Effects: A developmental toxicity study was conducted on New Zealand white rabbits. The doses tested were 50, 100, or 150 mg/kg. The teratogenic NOEL was greater than 50 mg/kg/day (LDT or lowest dose tested). The number of litters at termination of the study were insufficient to determine teratogenic effects at the 100 and 150 mg/kg/day levels. The embryotoxic NOEL was 50 mg/kg/day; an increased average number of resorptions occurred. The maternal toxic NOEL was 100 mg/kg, while the maternal LEL was 250 mg/kg (HDT or highest dose tested); decreased body weight, food consumption and increased mortality occurred at this dose level. The foetal toxic NOEL was reported to be 50 mg/kg/day. The fetotoxic LEL was 100 mg/kg/day, at which decreased foetal viability was reported. In another study, doses of 0, 200, 750, and 1,500 ppm of 39% Ethephon were tested in a multigeneration rat reproduction study. The NOEL was reported to be greater than 1500 ppm (highest dose tested).

Teratogenic Effects: The NOEL for rat teratogenic effects is 600 mg/kg/day, while in the rabbit, the NOEL was reported to be 50 mg/kg/day based on foetal resorptions at higher dose levels tested.

Mutagenic Effects: Ethephon studies in *Salmonella typhimurium* indicated no mutagenic effect up to 1,000 micrograms/100 microliters, without enzyme activation.

Carcinogenic Effects: A carcinogenicity study was conducted in mice using 70.6-72.1% Ethephon. The doses were administered in feed at 0, 15.5, 156 or 1630 mg/kg/day to CD-1 mice for 78 weeks. No dose-related evidence of carcinogenicity/oncogenicity was reported.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Effects on Birds: Data indicate that technical-grade Ethephon is slightly toxic on an acute oral basis to bobwhite quail, and slightly toxic on a subacute dietary basis to bobwhite quail and mallard ducks. The acute oral LC 50 in bobwhite quail is from 596 to 804 mg/kg. The acute oral LC50 is 3,750 ppm for mallard ducks and greater than 2,160 ppm in bobwhite quail. The average acute oral toxicity for formulated products is greater than 10,000 ppm in bobwhite quail, or practically non-toxic. Another source reported the oral LD50 for bobwhite quail to be 1,000 mg/kg. The chronic toxicity LC50 for birds was reported to be 804 mg/kg for quail and 3,750 ppm for ducks; and the LC50 (8 days) for mallard ducks was greater than 10,000 mg/kg diet.

Effects on Aquatic Organisms: Laboratory and field studies indicate that Ethephon is harmful to fish. Studies indicated LC50 values for fish of 170 mg/l for rainbow trout; and 180 mg/l for bluegill sunfish. Also, a 96 -hour LC50 for rainbow trout ranged from 254 mg/l to 350 mg/l and for bluegill sunfish 222 mg/l to 300 mg/l.

Effects on Other Animals (Nontarget species): Two studies using Ethephon were conducted in humans. In the first study, some symptoms characteristic of anticholinesterase activity was observed. Five humans of each sex were dosed with Ethephon at an average dose level of 1.8 mg/kg/day. Subjects receiving the test compound reported the following symptoms and/or signs; sudden onset of diarrhoea or an urgency of bowel movements, stomach cramps or gas and increased urgency or frequency of urination, and either an increase or decrease in appetite. None of the control subjects had complaints similar to the test group. Plasma CHE and RBC CHE activities were similar to or higher than initial values in test subjects. In the second human study, 10 humans of each sex were administered Ethephon at 0.5 mg/kg/day for 16 days, followed by a 2-week recovery period. Dose related effects occurred in plasma cholinesterase activity, but not in red blood cell cholinesterase activity. The effect was reversible within 15 days. When the control group and test groups were compared, the decreased plasma cholinesterase activity was statistically significant. No dose-related



effects were seen in hematology, blood chemistry, or urine analysis. Based on this study, the NOEL for plasma cholinesterase inhibition in humans is less than 0.5 mg/kg/day. Ethephon usage has resulted in four cases of skin injury (irritation) reported from 1980 through 1986 in California due to exposure to field residues. Ethephon is considered relatively non-toxic to honeybees.

Persistence/Degradability: No Data

Bioaccumulative potential: No Data

Mobility in soil: Ethephon was found to have low to moderate mobility in soils ranging in texture from loamy sand to peat and silt loam based on soil thin layer chromatography tests. Therefore, the potential for contamination of groundwater appears to be low to moderate. In soil, rapid degradation to phosphoric acid, ethylene, and chloride ions was reported.

13. DISPOSAL CONSIDERATIONS

Disposal methods: Refer to Waste Management Authority. Dispose of contents/container in accordance with local/regional/national/international regulations. Break, crush or puncture and dispose of empty containers in a local authority landfill. Triple rinse and bury rinsate and empty capsules in a local authority landfill. If no landfill is available, bury the containers below 0.5m in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product must not be burnt. Do NOT re-use containers for any other purpose.

14. TRANSPORT INFORMATION

UN Number 3265
Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S
Class 8
Packaging Group III

15. REGULATORY INFORMATION

Poison schedule S6

(SUSMP):

APVMA/TGA approval no.: 70064

AICS: All the constituents of this material are either listed on the Australian Inventory of Industrial Chemicals (Inventory), not required due to the nature of the chemical, or have been assessed under the Industrial Chemicals Act 2019 as amended.

16. OTHER INFORMATION

General information: None.

Issue number: 002

Issue date: 26/05/2026

In any event, the review and, if necessary, the re-issue of an SDS shall be no longer than 5 years after the last date of issue.

Reason(s) for issue: New SDS

Literary reference: ADG Code - Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)
APVMA – Agricultural Pesticides and Veterinary Medicines Australia
GHS - Globally Harmonised System of Classification and Labelling of Chemicals (3rd revised edition) 2009
Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice



Safety Data Sheet: EuroChem Ethephon 720 Growth Regulator

Date of Issue: 26 May 2026

STEL - Short term exposure limit means the average airborne concentration of a substance calculated over a 15-minute period. The STEL should not be exceeded at any time during a normal eight hour working day.

SUSMP - Standard for the Uniform Scheduling of Medicines & Poisons

SWA - Safe Work Australia, formerly ASCC and NOHSC

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

WHS – Workplace Health and Safety

The physical values and properties described in this SDS are typical values based on scientific literature and material produced to date, and are believed to be reliable. The supplier provides no warranties, either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein. The information is supplied upon the condition that the persons receiving information will make their own determination as to the suitability for their purposes prior to use of this product. Due care should be taken to ensure that the use of this product and its disposal is in compliance with all relevant Federal, State and Local Government regulations.

END SDS