



# Material Safety Data Sheet

## PROXY GROWTH REGULATOR

MSDS Number: 141  
MSDS Version 3.0

### SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**Product Name** PROXY GROWTH REGULATOR  
**Chemical Name** ETHEPHON  
**Synonym**  
**MSDS Number** 141  
**Chemical Family**  
**Chemical Formulation** C<sub>2</sub>H<sub>6</sub>ClO<sub>3</sub>P  
**EPA Registration No.** 432-1230  
**Canadian Registrat. No.**

Aventis  
95 Chestnut Ridge Road  
Montvale, NJ 07645  
USA

For Product Use Information: (800)331-2867 Monday through Friday  
8:00AM-4:30PM  
For Medical Emergency contact DART: (800) 334-7577 24 Hours/Day  
For Transportation Emergency CHEMTREC: (800) 424-9300 24 Hours/Day

**Product Use Description** FIFRA regulated use only.

### SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component Name</u>	<u>CAS No.</u>	<u>Concentration % by Weight</u>	
		<u>Minimum</u>	<u>Maximum</u>
ETHEPHON ((2-CHLOROETHYL) PHOSPHONIC ACID)	16672-87-0	21.7000	
Other ingredients (Trade secret)		78.3000	

### SECTION 3. HAZARDS IDENTIFICATION

*NOTE: Please refer to Section 11 for detailed toxicological information.*

#### Emergency Overview

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Corrosive: Causes irreversible eye damage. Wear safety goggles when handling. Harmful if swallowed or absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. Do not inhale vapors, as this product will irritate mucous membranes.

**Physical State** liquid

**Odor** neutral

**Appearance** clear

#### **Immediate Effects**

##### **Eye**

Corrosive: Causes irreversible eye damage.  
Liquid or vapor can cause redness, tearing, irritation, eye injury which may persist for several days.

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<b>Skin</b>	Harmful if absorbed through skin. May cause redness, irritation, swelling, on prolonged contact. .
<b>Ingestion</b>	Harmful if ingested. May cause burns to mouth and esophagus, cest pain, abdominal pain.
<b>Inhalation</b>	Harmful if inhaled. Mists may cause upper respiratory tract irritation, coughing, sore throat.
<b>Chronic or Delayed Long-Term</b>	This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens. Prolonged contact can cause chronic bronchitis.
<b>Medical Conditions Aggravated by Exposure</b>	Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

### SECTION 4. FIRST AID MEASURES

<b>Eye</b>	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lense, if present, after the first 5 miutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
<b>Skin</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.
<b>Ingestion</b>	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
<b>Inhalation</b>	Move person to fresh air. If person is not breathing, call 911 or ambulance, and then give artificial respiration preferably mouth-to-mouth if possible. Call poison control center or doctor for further treatment advice.
<b>Note to Physician</b>	<p>All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.</p> <p>Probable mucosal damage may contraindicte the use of gastric lavage. No specific antidote is available. All treatments should be based on observed signs and symptoms of distress in the patient.</p> <p>Victims of severe overexposure, by inhalation, should be kept under medical observation for up to 72 hours for delayed onset of pulmonary edema. In a victim of overexposure by ingestion, careful gastric lavage is required due to the possibility of stomach or esophageal perforation. This material is an acid, but the use of alkaline substances to neutralize it is contraindicated.</p>

### SECTION 5. FIRE FIGHTING MEASURES

<b>Flash Point</b>	Not Applicable
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<b>Fire and Explosion Hazards</b>	Under fire conditions, toxic, corrosive fumes are emitted.
<b>Suitable Extinguishing Media</b>	Not combustible. Use extinguishing method suitable for surrounding fire.
<b>Fire Fighting Instructions</b>	Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

<b>General and Disposal</b>	<p>Evacuation Procedures and Safety: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.</p> <p>Cleanup and Disposal of Spill: Pump any free liquid into an appropriate closed container (see Section 7: Handling and Storage). Absorb with an inert absorbent. Sweep up and place in an appropriate closed container (see Section 7: Handling and Storage). Clean up residual material by washing area with water. Collect washings for disposal. Decontaminate tools and equipment following cleanup.</p>
<b>Land Spill or Leaks</b>	<p>Containment of Spill: Dike spill using absorbent or impervious materials such as earth, sand or clay. Follow procedure described under Cleanup and Disposal of Spill.</p> <p>Environmental and Regulatory Reporting: Do not flush to drain. If spilled on the ground, the affected area should be removed to a depth of one or two inches and placed in an appropriate container for disposal. Prevent material from entering public sewer system or any waterways.</p>

### SECTION 7. HANDLING AND STORAGE

<b>Handling Procedures</b>	Do not get on skin or in eyes. Avoid breathing vapors and mists. Do not ingest. Avoid getting material on clothing. Do not contaminate water sources, food or feedstuffs when disposing of left-over material.
<b>Storing Procedures</b>	Do not contaminate water, food, or feed by storage and disposal.
<b>Work/Hygienic Procedures</b>	<p>Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:</p> <ol style="list-style-type: none"><li>(1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.</li><li>(2) Wash hands and face carefully before eating, drinking, chewing gum, using tobacco, applying cosmetics, or using the toilet.</li><li>(3) Wash exposed skin promptly to remove accidental splashes of contact with this material.</li></ol>

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- (4) Users should remove clothing immediately if pesticide gets inside. Then wash body thoroughly and change into clean clothing. The contaminated clothing should be washed before reuse.
- (5) Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing.
- (6) Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product concentrate. Do not reuse them.
- (7) Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.
- (8) Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.
- (9) Do not apply this product in a way that will contact workers or other persons, either directly or through drift.

**Min/Max Storage Temperatures** Not Available

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls** Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures.

**Eye/Face Protection** Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

Face contact should be prevented through use of a face shield and protective eyewear.

**Body Protection** Skin contact must be prevented through the use of permeation resistant clothing including long-sleeved shirts and long pants, chemical resistant gloves and shoes plus socks, selected with regard for use conditions and exposure potential.

An emergency shower must be readily accessible to the work area.

Consideration must be given both to durability as well as permeation resistance.

**Respiratory Protection** When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Under normal conditions, in the absence of other airborne contaminants, the following devices should provide protection from this material up to the conditions specified by the appropriate OSHA, WHMIS or ANSI standard(s): Air-purifying (half-mask/full-face) respirator with cartridges/canister approved for use

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against dusts, mists and fumes, pesticides.

Under conditions immediately dangerous to life or health, or emergency conditions with unknown concentrations, use a full-face positive pressure air-supplied respirator equipped with an emergency escape airsupply unit or use a self-contained breathing apparatus unit.

### General Protection

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

Long-sleeved shirts and long pants

Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride

Shoes plus socks and protective eyewear.

**Exposure Limits**                      None Established

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	clear
<b>Physical State</b>	liquid
<b>Odor</b>	neutral
<b>pH</b>	1.9 at 1 wt/wt%.
<b>Vapor Pressure</b>	<< 0.01 mmHg at 25 °C
<b>Vapor Density (air = 1)</b>	Not Available
<b>Specific Gravity</b>	1.106 at 25 °C
<b>Boiling Point</b>	Not Available
<b>Melting/Freezing Point</b>	-5 °C
<b>Solubility (in water)</b>	100 wt/wt% at 25 °C soluble
<b>Molecular Weight</b>	144.5
<b>Decomposition Temperature</b>	170 °C

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**Other Information** Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product Information phone number in Section 1 for its exact specifications.

### SECTION 10. STABILITY AND REACTIVITY

**Chemical Stability** This material is stable under normal handling and storage conditions described in Section 7.

**Conditions to Avoid** elevated temperatures  
extreme humidity

**Incompatibility** zinc  
iron  
copper  
strong oxidizing agents  
bases  
mild steel  
aluminum

**Hazardous Products of Decomposition** Decomposition Type: thermal  
hydrogen chloride  
oxides of carbon

**Hazardous Polymerization (Conditions to avoid)** not applicable

### SECTION 11. TOXICOLOGICAL INFORMATION

**Acute Oral Toxicity** Rat: LD50: > 5,000 mg/kg

**Acute Dermal Toxicity** Rabbit: LD50: > 2,000 mg/kg

**Acute Inhalation Toxicity** Acute Respiratory Irritation:  
No test data found for product.

Acute Inhalation Toxicity:  
No test data found for product.

**Skin Irritation** Rabbit: Minimally Irritating

**Eye Irritation** Rabbit: Moderately irritating

**Chronic Toxicity** No additional test data found for product.

#### Assessment Carcinogenicity

**ACGIH**

None

**NTP**

None

**IARC**

None

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OSHA  
None

### SECTION 12. ECOLOGICAL INFORMATION

<b>Environmental Precautions</b>	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 washwaters.
<b>Ecological Information</b>	For ecotoxicological data call the product information phone number listed in Section 1.
<b>Environmental Fate</b>	For chemical fate data call the product information phone number listed in Section 1.

### SECTION 13. DISPOSAL CONSIDERATIONS

<b>General Disposal Guidance</b>	Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions Contact your State Pesticide or Environmental Control Agency or Hazardous Waste representative at the nearest EPA Regional Office for guidance. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.
<b>Container Disposal</b>	Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke.  EPA Hazardous Waste - YES EPA RCRA HAZARDOUS WASTE CODES: C Corrosive.

### SECTION 14. TRANSPORT INFORMATION

For Transportation Regulatory Information call the Product Information phone number in Section 1.

### SECTION 15. REGULATORY INFORMATION

#### US Federal

<b>EPA Registration No.</b>	432-1230
<b>TSCA list</b>	None
<b>TSCA 12b export notification</b>	None
<b>SARA Title III - section 302 - notification and information</b>	None
<b>SARA Title III - section 313 - toxic chemical release reporting</b>	None

#### US States Regulatory

<b>CA Prop65</b>	This product contains a chemical known to the state of California to cause cancer.
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This product contains a chemical known to the state of California to cause birth defects or other reproductive harm.

None

### US State right-to-know ingredients

None

### Canadian Regulations

Canadian Registrat. No.

Canadian Domestic Substance List

None

### Environmental

CERCLA

None

Clean Water Section 307 Priority Pollutants

None

Safe Drinking Water Act Maximum Contaminant Levels

None

### International Regulations

EU Classification

None

European Inventory of Existing Commercial Substances (EINECS)

ETHEPHON ((2-CHLOROETHYL)

16672-87-0

PHOSPHONIC ACID)

## SECTION 16. OTHER INFORMATION

	Health	Flammability	Reactivity	Others
HMIS	2	1	0	
NFPA	2	1	0	

Reason for Revisions: Updating Ariel Data, Revisions to Section 8, 11 and 15.

Print Date: 11/14/2001

Supersedes MSDS, which is older than: 11/13/2001

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