

**Syngenta Crop Protection, Inc.**  
**Post Office Box 18300**  
**Greensboro, NC 27419**

**In Case of Emergency, Call**  
**1-800-888-8372**

**1. PRODUCT IDENTIFICATION**

Product Name: **ARCHER INSECT GROWTH REGULATOR** Product No.: A12861A  
 EPA Signal Word: Caution  
 Active Ingredient(%): Pyriproxifen (1.3%) CAS No.: 95737-68-1  
 Chemical Name: 2-[1-Methyl-2-(4-phenoxyphenoxy) ethoxyl] pyridine  
 Chemical Class: Insect growth regulator  
 EPA Registration Number(s): 100-1111 **Section(s) Revised: 2, 3, 5, 8, 15**

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
Petroleum Solvent	Not Established	Not Established	100 ppm (525 mg/m <sup>3</sup> ) TWA (exposure limits for petroleum distillate - stoddard solvent)*	No
Glycol Ethers	Not Established	Not Established	Not Established	No
Pyriproxifen (1.3%)	Not Established	Not Established	Not Established	No

\* recommended by manufacturer

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.  
 Syngenta Hazard Category: B

**3. HAZARDS IDENTIFICATION**
Symptoms of Acute Exposure

May cause eye and skin irritation.

Exposure to high vapor levels may cause headache, dizziness, numbness, nausea, incoordination, or other central nervous system effects.

Hazardous Decomposition Products

Can decompose at high temperatures forming toxic gases.

Physical Properties

Appearance: Colorless liquid

Odor: Petroleum solvent

Unusual Fire, Explosion and Reactivity Hazards

Combustible liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Heavy vapors can flow along surfaces to distant ignition sources and flash back.

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

**4. FIRST AID MEASURES**

Have the product container, label or Material Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

- Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
- Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.
- Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.
- Inhalation: If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

#### Notes to Physician

There is no specific antidote if this product is ingested.

Treat symptomatically.

Contains petroleum distillate - vomiting may cause aspiration pneumonia.

#### Medical Condition Likely to be Aggravated by Exposure

None known.

## **5. FIRE FIGHTING MEASURES**

### Fire and Explosion

- Flash Point (Test Method): 153°F (Setaflash)
- Flammable Limits (% in Air): Lower: % Not Applicable Upper: % Not Applicable
- Autoignition Temperature: Not Available
- Flammability: Combustible liquid.

### Unusual Fire, Explosion and Reactivity Hazards

Combustible liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Heavy vapors can flow along surfaces to distant ignition sources and flash back.

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

### In Case of Fire

Use appropriate extinguishing media for combustibles in the area. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

## **6. ACCIDENTAL RELEASE MEASURES**

### In Case of Spill or Leak

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

## **7. HANDLING AND STORAGE**

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.**

**FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.**

- Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.
- Eye Contact: Where eye contact is likely, use chemical splash goggles.
- Skin Contact: Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.
- Inhalation: A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH approved respirator with any R, P or HE filter.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: Colorless liquid
- Odor: Petroleum solvent
- Melting Point: Not Applicable
- Boiling Point: Not Available
- Specific Gravity/Density: 0.85 g/ml @ 68°F (20°C)
- pH: Not Available

### Solubility in H<sub>2</sub>O

Pyriproxifen: 0.367 +/- 0.004 mg/l

### Vapor Pressure

Pyriproxifen: < 1.0 x 10<sup>(-7)</sup> mmHg @ 73.06°F (22.81°C)

## 10. STABILITY AND REACTIVITY

- Stability: Stable under normal use and storage conditions.
- Hazardous Polymerization: Will not occur.
- Conditions to Avoid: Heat and acidic or alkaline conditions may cause this product to break down.
- Materials to Avoid: Contact with strong oxidizing agents may produce an explosive mixture.
- Hazardous Decomposition Products: Can decompose at high temperatures forming toxic gases.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity/Irritation Studies (Finished Product)

- Ingestion: Practically Non-Toxic  
Oral (LD50 Rat) : > 5,000 mg/kg body weight
- Dermal: Slightly Toxic  
Dermal (LD50 Rat) : > 2,000 mg/kg body weight
- Inhalation: Practically Non-Toxic  
Inhalation (LC50 Rat) : > 7.6 mg/l air - 4 hours
- Eye Contact: See "Other Toxicity Information", Sec. 11
- Skin Contact: See "Other Toxicity Information", Sec. 11
- Skin Sensitization: Not a skin sensitizer.

### Reproductive/Developmental Effects

- Pyriproxifen: No test article related reproductive effects were observed.  
NOEL for systemic toxicity was 1000 ppm. The NOEL for reproductive effects was 5000 ppm.
- No test article related teratogenic effects were observed.  
Teratology (rat): No Observable Effect Level (NOEL), Dams-100 mg/kg/day, Fetuses-100

mg/kg/day, Offspring-1000 mg/kg/day. Not a reproductive toxin.  
Teratology (rabbit): No Observable Effect Level (NOEL), Dams-100 mg/kg/day, Fetuses-100 mg/kg/day. Not a reproductive toxin.  
Gene Mutation: Negative.  
Chromosomal Aberration: Negative.  
Unscheduled DNA synthesis: Negative.

#### Chronic/Subchronic Toxicity Studies

Pyriproxifen: None available.

#### Carcinogenicity

Pyriproxifen: No test article related carcinogenic effects were observed. The No Observable Effect Level was 30 mg/kg/day. No evidence of increased tumor incidence when fed in the diet at 0, 120, 600 & 6000 ppm/day. The NOEL for systemic effects was 120 ppm/day.

No test article related oncogenic effects were observed. No evidence of increased tumor incidence when fed in the diet at 0, 120, 600 & 6000 ppm/day. The NOEL for systemic effects was 600 ppm/day for males, 120 ppm/day for females.

#### Other Toxicity Information

Eye contact can cause temporary irritation, tearing and blurred vision.  
Repeated and/or prolonged skin contact may cause irritation and dermatitis.

#### Toxicity of Other Components

##### Glycol Ethers

May cause respiratory tract, skin, eye and digestive tract irritation. May be absorbed through intact skin.

##### Petroleum Solvent

The supplier reports that high vapor concentrations (over 700 PPM) may irritate eyes, respiratory tract and may cause central nervous system effects such as headache, dizziness, or anesthesia. Prolonged or repeated skin exposure can cause defatting, resulting in dermatitis. Laboratory animal studies have shown that prolonged and repeated inhalation exposure to light hydrocarbon vapors in the same naphtha boiling range as this solvent can produce adverse kidney effects in male rats. These effects were not observed in female rats or male and female mice. In a number of human studies, there was no clinical evidence of such effects at normal occupational levels.

#### Target Organs

##### Active Ingredients

Pyriproxifen: Not available

##### Inert Ingredients

Glycol Ethers: Kidney, CNS

Petroleum Solvent: CNS, respiratory tract, skin

## **12. ECOLOGICAL INFORMATION**

#### Summary of Effects

Pyriproxifen:

Care should be taken to avoid contamination of the aquatic environment.

#### Eco-Acute Toxicity

Pyriproxifen: Rainbow Trout 96-hour LC50 >0.325 mg/L  
Bobwhite Quail Oral LD50 >2,000 mg/kg  
Mallard Oral LD50 >2,000 mg/kg  
Daphnia magna 48-hour EC50 0.40 mg/L  
Bobwhite Quail LC50 >5,200 ppm  
Mallard Duck LC50 >5,200 ppm  
Algae 72-hour EC50 0.064 mg/L

#### Eco-Chronic Toxicity

Pyriproxifen: Not Available

Environmental Fate

Pyriproxifen:  
Not available

**13. DISPOSAL CONSIDERATIONS**

Disposal

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

**14. TRANSPORT INFORMATION**

DOT Classification

Non-Bulk (<119 gallons): Not regulated by DOT.

Bulk (>119 gallons): Combustible Liquid, N.O.S. (petroleum distillates), NA1993, PGIII

B/L Freight Classification

Insecticides, NOIBN, o/t poison

Comments

None

**15. REGULATORY INFORMATION**

EPCRA SARA Title III Classification

Section 311/312 Hazard Classes: Acute Health Hazard  
Fire Hazard

Section 313 Toxic Chemicals: Glycol Ethers (CAS No. Mixture)

California Proposition 65

Not Applicable

CERCLA/SARA 302 Reportable Quantity (RQ)

None

RCRA Hazardous Waste Classification (40 CFR 261)

Not Applicable

TSCA Status

Exempt from TSCA, subject to FIFRA

**16. OTHER INFORMATION**

NFPA Hazard Ratings

Health: 1  
Flammability: 2  
Instability: 0

HMIS Hazard Ratings

Health: 1  
Flammability: 2  
Reactivity: 0

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 08/19/1998

Revision Date: 12/13/2005

Replaces: 02/06/2002

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

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End of MSDS