MATERIAL SAFETY DATA SHEET

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, 8

2. HAZARDS IDENTIFICATION

Health and Environmental

May be harmful in contact with skin. May cause drowsiness or dizziness. May be harmful if swallowed and enters airway.

Hazardous Decomposition Products

None known.

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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
Petroleum Solvent	Not Established	Not Established	100 ppm (525 mg/m³) TWA (exposure limits for petroleum distillate - stoddard solvent) *	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, S

4. FIRST AID MEASURES

Have the product container, label or Material Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison contol 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 AND PACKAGING 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 gloves (such as barrier laminate or Viton), coveralls, socks and chemical-resistant footwear.
Inhalation:	A combination particulate/organic vapor respirator should be used until effective engineering controls are installed to comply with occupational exposure limits, or until exposure limits are established. Use a NIOSH certified respirator with an organic vapor (OV) cartridge or canister with any R, P or HE filter. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

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 H2O

Pyriproxifen:	0.367 +/- 0.004 mg/l

Vapor Pressure

Pyriproxifen:	< 1.0 x 10(-7) 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:	None known.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies (Finished Product)

Ingestion:		
	Oral (LD50 Rat) :	> 5000 mg/kg body weight
Dermal:		
	Dermal (LD50 Rat) :	> 2000 mg/kg body weight
Inhalation:		
	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

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

Petroleum Solvent: CNS, respiratory tract, skin

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects

Pyriproxifen:

Fish (Rainbow Trout) 96-hour LC50 >0.325 mg/L

Bird (Bobwhite Quail) LD50 Oral >2000 mg/kg

Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 0.40 mg/L

Algae 72-hour EC50 0.064 mg/L

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: Not Applicable

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		HMIS Hazard Ratings	
Health:	1	Health:	1
Flammability:	2	Flammability:	2
Instability:	0	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: 8/19/1998
Revision Date: 9/24/2009 Replaces: 12/13/2005

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End of MSDS