

ARCHER®

Date: 12/17/2014
 Replaces: 11/11/2010

1. PRODUCT IDENTIFICATION

Product identifier on label: **ARCHER®**
 Product No.: A12861A
 Use: Insect Growth Regulator
 Manufacturer: Syngenta Crop Protection, LLC
 Post Office Box 18300
 Greensboro NC 27419
 Manufacturer Phone: 1-800-334-9481

Emergency Phone: 1-800-888-8372

2. HAZARDS IDENTIFICATION

Classifications: Skin Corrosion/Irritation: Category 2
 Specific Target Organ Toxicity: Drowsiness Category 3
 Specific Target Organ Toxicity: Respiratory Irritation Category 3
 Aspiration Hazard: Category 1
 Flammable Liquid: Category 4
 Eye Damage/Irritation: Category 2B

Signal Word (OSHA): Danger

Hazard Statements: Combustible liquid
 May be fatal if swallowed and enters airways
 Causes skin irritation
 Causes eye irritation
 May cause respiratory irritation
 May cause drowsiness or dizziness

Hazard Symbols:



Precautionary Statements: Keep away from heat, sparks, open flames, hot surfaces. No smoking.
 Avoid breathing mist, vapors, spray.
 Wash hands and face thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 Wear protective gloves, protective clothing, eye protection.
 If swallowed: Immediately call a poison center, doctor or Syngenta.
 If on skin: Wash with plenty of soap and water.
 If skin irritation occurs: Get medical advice.

ARCHER®

Date: 12/17/2014
Replaces: 11/11/2010

If inhaled: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice.
Call a poison center, doctor or Syngenta if you feel unwell.
See Section 4 First Aid Measures.
Do NOT induce vomiting.
Take off contaminated clothing and wash it before reuse.
In case of fire: Use dry chemical, foam or CO2 for extinction.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents and container in accordance with local regulations.

Other Hazard Statements: None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common Name	CAS Number	Concentration
Petroleum Solvent	Petroleum Solvent	Trade Secret	Trade Secret
Other ingredients	Other ingredients	Trade Secret	98.7%
2-[1-Methyl-2-(4-phenoxyphenoxy)ethoxy] pyridine	Pyriproxifen	95737-68-1	1.3%

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

Have the product container, label or 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.

Most important symptoms/effects:

- Eye irritation
- Skin irritation
- Drowsiness or dizziness
- Respiratory irritation

ARCHER®

Date: 12/17/2014
Replaces: 11/11/2010

Indication of immediate medical attention and special treatment needed:

There is no specific antidote if this product is ingested.
Treat symptomatically.
Contains petroleum distillate - vomiting may cause aspiration pneumonia.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific 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.

Special protective equipment and precautions for firefighters:

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

Follow exposure controls/personal protection outlined in Section 8.

Methods and materials for containment and cleaning up:

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

Precautions for safe handling:

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.

Conditions for safe storage, including any incompatibilities:

Store locked up.

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.

Occupational Exposure Limits:

Chemical Name	OSHA PEL	ACGIH TLV	Other	Source
Petroleum Solvent	Not Established	Not Established	50 mg/m ³ TWA	Manufacturer

ARCHER®

Date: 12/17/2014
Replaces: 11/11/2010

Other ingredients	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Pyriproxifen	Not Established	Not Established	Not Established	Manufacturer

Appropriate engineering controls:

Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:

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

Odor Threshold: Not Available

pH: Not Available

Melting point/freezing point: Not Applicable

Initial boiling point and boiling range: Not Available

Flash Point (Test Method): 153°F (Setaflash)

Flammable Limits (% in Air): Not Available

Flammability: Combustible liquid.

Vapor Pressure: Pyriproxifen < 1.0 x 10⁻⁷ mmHg @ 73.06°F (22.81°C)

Vapor Density: Not Available

Relative Density: 0.847 g/ml @ 68°F (20°C)

Solubility (ies): Pyriproxifen 0.367 +/- 0.004 mg/l

Partition coefficient: n-octanol/water: Not Available

Autoignition Temperature: Not Available

Decomposition Temperature: Not Available

Viscosity: Not Available

Other: None

ARCHER®

Date: 12/17/2014
Replaces: 11/11/2010

10. STABILITY AND REACTIVITY

Reactivity: Not reactive.

Chemical stability: Stable under normal use and storage conditions.

Possibility of hazardous reactions: Will not occur.

Conditions to Avoid: Heat and acidic or alkaline conditions may cause this product to break down.

Incompatible materials: None known.

Hazardous Decomposition Products: None known.

11. TOXICOLOGICAL INFORMATIONHealth effects information

Likely routes of exposure: Dermal, Inhalation

Symptoms of exposure: Eye irritation, Drowsiness or dizziness, Skin irritation, Respiratory irritation

Delayed, immediate and chronic effects of exposure: Eye irritation, Skin irritation, Drowsiness or dizziness, Respiratory irritation

Numerical measures of toxicity (acute toxicity/irritation studies (finished product))

Ingestion: Oral (LD50 Rabbit) : > 5000 mg/kg body weight

Dermal: Dermal (LD50 Rabbit) : > 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

ARCHER®

Date: 12/17/2014
Replaces: 11/11/2010

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.

Chemical Name	NTP/IARC/OSHA Carcinogen
---------------	--------------------------

Petroleum Solvent	No
-------------------	----

Other ingredients	No
-------------------	----

2-[1-Methyl-2-(4-phenoxyphenoxy) ethoxyl] pyridine	No
--	----

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

Other ingredients
Not Applicable

Petroleum Solvent
Inhalation of vapors at high concentrations can cause central nervous system effects (dizziness, headache), irritation to eyes or respiratory tract.

Target OrgansActive Ingredients

Pyriproxifen: Not available

Inert Ingredients

Other ingredients: Not Applicable

Petroleum Solvent: Respiratory tract, stomach, liver, thyroid, urinary bladder, CNS, skin

12. ECOLOGICAL INFORMATION

Eco-Acute Toxicity

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.

ARCHER®

Date: 12/17/2014

Replaces: 11/11/2010

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification

Ground Transport - NAFTA

< 119 gallons: Not regulated

> 119 gallons:

Proper Shipping Name: Combustible Liquid, N.O.S. (Petroleum Distillates)

Hazard Class: Combustible Liquid

Identification Number: NA 1993

Packing Group: PG III

Comments

Water Transport - International

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Pyriproxifen), Marine Pollutant

Hazard Class: Class 9

Identification Number: UN 3082

Packing Group: PG III

Air Transport - International

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Pyriproxifen)

Hazard Class: Class 9

Identification Number: UN 3082

Packing Group: PG III

Note: This product is currently not regulated for airfreight within the NAFTA region. However, effective 01/01/2011 the above classification must be used.

15. REGULATORY INFORMATION

Pesticide Registration:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

Caution: Harmful if swallowed or absorbed through skin. Do not breathe vapor or spray mist. Avoid contact with skin or eyes. In case of contact, flush with plenty of water. Wash with soap and warm water after use. Obtain medical attention if irritation persists. Avoid contamination of food or feedstuffs.

EPA Registration Number(s):

100-1111

EPCRA SARA Title III Classification:

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

Section 313 Toxic Chemicals: None

CERCLA/SARA 304 Reportable Quantity (RQ):

None

ARCHER®

Date: 12/17/2014
 Replaces: 11/11/2010

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
*	Chronic

Syngenta Hazard Category: B

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 8/19/1998

Revision Date: 12/17/2014

Replaces: 11/11/2010

Section(s) Revised: 1-16

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.