1. **IDENTIFICATION**

**PRODUCT NAME:** Piston

**DESCRIPTION**
A liquid insecticide

**EPA REGISTRATION NUMBER:** 91234-19

**COMPANY IDENTIFICATION:**
Atticus, LLC
5000 CentreGreen Way, Suite 100
Cary, NC 27513

2. **HAZARDS IDENTIFICATION**

**WARNING**
- Harmful if swallowed
- Harmful if inhaled

Very toxic to aquatic life

3. **COMPOSITION / INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Chemical Name</th>
<th>CAS #</th>
<th>Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorfenapyr</td>
<td>4-bromo-2-(4-chlorophenyl)-1-((ethoxymethyl)-5-(trifluromethyl)-1H-pyrrole-3-carbonitrile</td>
<td>122453-73-0</td>
<td>21.40%</td>
</tr>
</tbody>
</table>

4. **FIRST AID MEASURES**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical assistance, call SafetyCall: 1-844-685-9173. For chemical emergency: spill, leak, fire, exposure or accident, call CHEMTREC: 1-800-424-9300.

**IF SWALLOWED:** Immediately call a doctor or poison control center. Do not induce vomiting unless told to do so by a poison control center or doctor. Have person sip a glass of water if able to swallow. Do not give anything by mount to an unconscious person.

**IF INHALED:** Move person to fresh air and keep comfortable for breathing. If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably by mouth to mouth, if possible. Call a doctor or poison control center if you feel unwell.

5. **FIRE-FIGHTING MEASURES**

**Flash Point:** > 110°C (> 230°F)

**Fire and Explosion Hazards:** Thermal decomposition may produce toxic fumes (see Section 10).

**Extinguishing Medium:** Water fog, foam, dry chemical or carbon dioxide (CO₂).

**Fire Fighting Equipment:** Firefighters should be equipped with self-contained positive pressure breathing apparatus and full bunker gear.

**Fire Fighting Instructions:** Evacuate area of all unnecessary personnel and fight fire from a safe distance upwind. Contain contaminated water / firefighting water; do not allow to enter drains or waterways. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

**NFPA Ratings:** Health – 1 / Flammability – 1 / Reactivity - 0

6. **ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Isolate area and keep unnecessary and unprotected personnel from entering. Wear suitable personal protective clothing and equipment as described in Section 8 of this document.

**Environmental Precautions:** Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

**Spill Cleanup:** Dike spill using suitable absorbent or impervious materials such as sand, cat litter, commercial clay, gel or similar absorbents. Collect and contain contaminated absorbent and place in an appropriate container for disposal. Pump any free liquid into an appropriate closed container and decontaminate tools and equipment following cleanup. Collect washings for disposal.

7. **HANDLING AND STORAGE**

**Handling:** Avoid breathing vapors or spray mist. Avoid contact with skin, eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

**Storage:** Keep this product in its tightly closed original container, when not in use. Do not store below 32°F. Do not store in direct sunlight. Store in a cool, dry (preferably locked) area that is inaccessible to children and animals.
8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

Protective Clothing: Mixers, loaders, applicators, and other handlers must wear long-sleeved shirts, long pants, shoes plus socks, and chemical resistant gloves made of any waterproof material (such as barrier laminate, butyl rubber or nitrile rubber, neoprene, or polyvinyl chloride (PVC), or viton &lt;14 mils).

General: 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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with the product’s concentrate. Do not reuse them.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Opaque white liquid
ODOR: Mild sweet
FLASHPOINT: N/A (will not flash)
PH: 5.86 (corrected to 25°C) 1% dispersion
DENSITY: 1.10 g/cm³ (at 25°C)
SOLUBILITY: Soluble

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Excessive heat, do not store near heat or flame.
CHEMICAL STABILITY: Stable under all normal use and storage conditions.
INCOMPATIBILITY WITH OTHER MATERIALS: Strong oxidizing agents
HAZARDOUS DECOMPOSITION PRODUCTS: This product is chemically stable and no hazardous reactions should occur if stored and handled as prescribed / indicated. When thermally decomposed, may release oxides of carbon and nitrogen, hydrogen bromide, hydrochloric acid, hydrofluoric acid, hydrogen fluoride, halogenated hydrocarbons, and hydrocarbons.
HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ORAL TOXICITY (RAT LD₅₀): 560-567 mg/kg
DERMAL TOXICITY (RAT LD₅₀): > 2,000 mg/kg
INHALATION TOXICITY (RAT LC₅₀): 2.284 mg/L
EYE IRRITATION: Non-irritating
SKIN IRRITATION: Non-irritating
SKIN SENSITIZATION: Guinea Pig – Not a contact sensitizer

CARCINOGENICITY:
EPA: Not Listed
ACGIH: Not Listed
OSHA: Not Listed

IARC: Not Listed

MUTAGENIC TOXICITY: No evidence of mutagenic effects during in vivo and in vitro assays.
REPRODUCTIVE TOXICITY: Not known to cause reproductive or birth defects at normal exposure levels.

12. ECOLOGICAL INFORMATION

This pesticide is toxic to aquatic organisms, birds, and wildlife.

The following information is for the active ingredient, Chlorfenapyr:

AQUATIC TOXICITY
Rainbow Trout (96-hour LC₅₀): 7.44 μg/L
Bluegill (96-hour LC₅₀): 11.6 μg/L
Daphnia (96-hour LC₅₀): 6.11 μg/L
Algae (EC₅₀): 132 μg/L

AVIAN TOXICITY
Bobwhite Quail (LD₅₀): 34 mg/kg
Mallard Duck (LD₅₀): 10 mg/kg

OTHER TOXICITY
Honey Bee (LD₅₀): 0.2 μg/bee

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.
CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Refer to the product label for specific container disposal instructions.

14. TRANSPORT INFORMATION

US DOT (shipped by land):
Containers < 1.3 gallons (5 Liters): Not regulated by DOT.
Containers > 1.3 gallons (5 Liters):
DOT Shipping Name: UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (contains Chlorfenapyr), 9, PG III
Emergency Response Guide: 171
Marine Pollutant: Yes

IMDG (shipped by vessel):
UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (contains Chlorfenapyr), 9, PG III, Marine Pollutant

IATA (shipped by air):
UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (contains Chlorfenapyr), 9, PG III
15. REGULATORY INFORMATION

FIFRA –
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. The following is the hazard information as required on the pesticide label:

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove contaminated clothing and wash clothing before reuse.

See inside label booklet for additional precautionary statements.

Environmental Hazards
This product is toxic to aquatic organisms, birds, and wildlife. Do not apply directly to water or to areas where surface water is present. Avoid spraying ponds or aquaria containing fish. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas.

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide. This product is excluded from listing requirements under EPA/TSCA.

SARA Title III – Section 302 Extremely Hazardous Substances
Not listed

SARA Title III – Section 311/312 Hazard Categories
Immediate

SARA Title III – Section 312 Threshold Planning Quantity
The threshold planning quantity (TPQ) for this product treated as a mixture is 10,000 lbs. This product contains no ingredients with a TPQ of less than 10,000 lbs.

SARA Title III – Section 313 Reportable Ingredients
None

CERCLA Reportable Quantity (RQ) –
None

CALIFORNIA PROP 65 STATUS –
This product does not contain any chemicals known to the state of California to cause cancer or reproductive harm.

CANADA –
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

16. OTHER INFORMATION

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

To the extent consistent with applicable law, neither Atticus, LLC nor Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ATTICUS, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ATTICUS, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SDS Version: 1.0
Effective Date: 9/29/2016