

**Trade Name:** Pro Ap IMI COMPLETE 0.24% Plus Fertilizer  
**Registration No.:** 228-610-040249

**DATE ISSUED:** 4/1/2013  
**SUPERSEDES:** NA

M07-024

### SECTION 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

**Manufacturer or Formulator:** Frick Services, Inc.  
 3154 W. Depot Street  
 Wawaka, IN 46794  
**CHEMTREC:** 800-424-9300  
**Emergency Phone:** 800-552-1754

**Product Name:** Pro Ap IMI COMPLETE 0.24% Plus Fertilizer  
**Common Name:** Pro Ap IMI COMPLETE 0.24% Plus Fertilizer  
**Chemical Type:** Inorganic Chemical Fertilizer with Pesticide  
**Chemical Name:** Mixture of Imidacloprid and Lambda-Cyhalothrin on Fertilizer

### SECTION 2 COMPOSITION INFORMATION

Chemical Name and Synonyms	C.A.S. No.	Chemical Formula	WT%	TLV	PEL
			<b>Hazardous</b>		
Imidacloprid	138261-41-3		0.20	Not Indicated	Not Indicated
Lambda-Cyhalothrin	91465-08-6		0.04	Not Indicated	Not Indicated
			<b>Non-Hazardous</b>		
Blend of the following non-hazardous ingredients:			99.76		Not available
Urea	57-13-6	(NH <sub>2</sub> ) <sub>2</sub> CO		10 mg/m <sup>3</sup> (dust) 5 mg/m <sup>3</sup> (resp)	
Ammonium Sulfate	7783-20-2	(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>		15 mg/m <sup>3</sup> (dust)	
Diammonium Phosphate	7783-28-0	(NH <sub>4</sub> ) <sub>2</sub> HPO <sub>4</sub>		15 mg/m <sup>3</sup> (dust) 5 mg/m <sup>3</sup> (resp)	
Potassium Sulfate	7778-80-5	K <sub>2</sub> SO <sub>4</sub>			
Potassium Chloride	7447-40-7	KCl		10 mg/m <sup>3</sup>	

### SECTION 3 HAZARDS IDENTIFICATION

**Emergency Overview:**

**Appearance and Odor:** Multi-colored to solid colored granular mixture with little odor.

**Warning Statements:** Keep out of reach of children. Do not get in eyes, on skin or on clothing. Avoid contact with eyes, skin, or clothing.

**Potential Health Effects:**

**Likely Routes of Exposure:** Inhalation, eye and skin contact.

**Eye Contact:** May be irritating to eyes. Dusts may cause irritation.

**Skin Contact:** May be irritating to skin.

**Ingestion:** Not know at these percentages. Ingestion of fertilizer component may cause abdominal pain, nausea, vomiting and diarrhea.

**Inhalation:** Not know at these percentages. Excessive inhalation of fertilizer dust may irritate the nose, throat and upper respiratory tract.

**Medical Conditions Aggravated by Exposure:** Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

See Section 11: TOXICOLOGICAL INFORMATION for more information.

**Potential Environmental Effects:**

This product is extremely toxic to fish and aquatic organisms and toxic to wildlife

See Section 12: ECOLOGICAL INFORMATION for more information.

### SECTION 4 FIRST AID MEASURES

**If in Eyes:** Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**If on Skin:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

**If Inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**If Swallowed:** 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 to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Note to Physician:** No specific antidote is available. Treat the patient symptomatically.

### SECTION 5 FIRE FIGHTING MEASURES

**Flash Point:** Not applicable

**Autoignition Temperature:** Not applicable **Flammability Limits:** Not applicable

**Extinguishing Media:** Use extinguishing media suitable for surrounding materials. Dry chemical, carbon dioxide, foam, water spray or fog.

**Special Fire Fighting Procedures:** Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

**Unusual Fire and Explosion Hazards:** If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

**Hazardous Decomposition Materials (Under Fire Conditions):** May produce hydrogen chloride, hydrogen fluoride, hydrogen sulfide, ammonia, and oxides of carbon, nitrogen, phosphorus and sulfur.

**National Fire Protection Association (NFPA) Hazard Rating:**

Rating for this product: Health: 1 Flammability: 1 Reactivity: 0

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### SECTION 6 ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

**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.

**Methods for Containment:** Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

**Methods for Clean-Up and Disposal:** Avoid creation of dusty conditions. If dry, sweep or scoop up material and place into container for disposal. If wet, pump any free liquid into an appropriate closed container. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

**Other Information:** Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

### SECTION 7 HANDLING AND STORAGE

**Handling:**

Do not get in eyes, on skin or on clothing. Avoid contact with eyes, skin, or clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**Storage:**

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out the reach of children, preferably in a locked storage area. Do not contaminate water, food, or feed by storage or disposal.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Engineering Controls:**

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

**Personal Protective Equipment:**

**Eye/Face Protection:** To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

**Skin Protection:** To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes and chemical-resistant gloves. An emergency shower or water supply should be readily accessible to the work area.

**Respiratory Protection:** Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

**General Hygiene Considerations:** 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: 1) Do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

**Exposure Guidelines:**

Component	OSHA		ACGIH		Unit
	TWA	STEL	TWA	STEL	
Imidacloprid	NE	NE	NE	NE	
Lambda-Cyhalothrin	NE	NE	NE	NE	

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

<b>Boiling Point:</b>	Not applicable	<b>Solubility in Water:</b>	Partially soluble
<b>Density:</b>	40 – 60 pounds/cubic foot	<b>% Volatiles (by volume):</b>	Not applicable
<b>Flashpoint:</b>	Non-flammable	<b>Vapor Pressure, mm Hg:</b>	Not applicable
<b>pH:</b>	Not listed	<b>Reaction with Water:</b>	None
<b>Appearance:</b>	Multi-colored granules.		
<b>Extinguishing Media:</b>	Use media suitable to extinguish source of fire.		

**SECTION 10 STABILITY AND REACTIVITY**

**Chemical Stability:** This material is stable under normal handling and storage conditions.

**Conditions to Avoid:** Excessive heat. Do not store near heat or flame.

**Incompatible Materials:** Strong oxidizing agents: bases and acids.

**Hazardous Decomposition Products:** Under fire conditions may produce hydrogen chloride, hydrogen sulfide, ammonia, and oxides of carbon, nitrogen, phosphorus and sulfur.

**Hazardous Reactions:** Hazardous polymerization will not occur.

**SECTION 11 TOXICOLOGY INFORMATION**

**Toxicological Data:**

Data from laboratory studies conducted on Imidacloprid Technical:

**Oral:** Rat LD50: 671 mg/kg (female) and 754 mg/kg (male)

**Dermal:** Rat LD50: >2,000 mg/kg

**Inhalation:** Rat 4-hr LC50: >4.92 mg/l

**Eye Irritation:** Rabbit: Non-irritating

**Skin Irritation:** Rabbit: Non-irritating

Data from laboratory studies conducted on Lambda-Cyhalothrin Technical:

**Oral:** Rat LD50: 56 mg/kg (female) and 79 mg/kg (male)

**Dermal:** Rat LD50: 696 mg/kg (female) and 632 mg/kg (male)

**Inhalation:** Rat 4-hr LC50: 0.06 mg/l

**Eye Irritation:** Rabbit: Mildly irritating

**Subchronic (Target Organ) Effects:** Repeated overexposure to imidacloprid, may affect heart, thyroid, blood chemistry, and liver. For Lambda-Cyhalothrin, contact with exposed skin may result in temporary itching, tingling, burning or numbness, called paresthesia. The symptoms normally disappear within 24 hours. Face and genital areas are especially susceptible to this effect. Paresthesia involving the face is also known as "subjective facial sensation" or SFS. Repeated overexposure to Lambda-Cyhalothrin may effect the liver and central nervous system.

**Carcinogenicity / Chronic Health Effects:** Prolonged overexposure to imidacloprid can cause effects the thyroid. Imidacloprid did not cause cancer in laboratory animal studies. The U.S. EPA has given imidacloprid a Group E classification (evidence of non-carcinogenicity in humans). Prolonged overexposure to Lambda-Cyhalothrin may effect the liver. For Lambda-Cyhalothrin, no treatment-related tumors in rats or mice.

**Reproductive Toxicity:** In a two-generation reproduction study in rats, imidacloprid produced reduced mean body weights and body weight gains. No other reproductive effects were observed. In studies with animals, Lambda-Cyhalothrin was not a reproductive toxicant.

**Developmental Toxicity:** Rat and rabbit studies on imidacloprid resulted in skeletal abnormalities, increased resorptions (rabbits) and reduced body weight gains at doses that were also toxic to mother animals. In studies with animals, Lambda-Cyhalothrin was not a development toxicant.

**Genotoxicity:** The imidacloprid mutagenicity studies, taken collectively, demonstrate that imidacloprid is not genotoxic or mutagenic. Animal tests with Lambda-Cyhalothrin did not demonstrate mutagenic effects.

**Assessment Carcinogenicity:** None listed with ACGIH, IARC, NTP or OSHA.

See Section 3: HAZARDS IDENTIFICATION for more information.

**SECTION 12 ECOLOGICAL INFORMATION**

**Ecotoxicity:**

Data on Imidacloprid Technical:

96-hour LC <sub>50</sub> Rainbow Trout:	211 mg/l	Japanese Quail Oral LD <sub>50</sub> :	31 mg/kg
48-hour EC <sub>50</sub> Daphnia:	85 mg/l	Bobwhite Quail Oral LD <sub>50</sub> :	152 mg/kg
96-hour LC <sub>50</sub> Mysid:	0.038 ppm	House Sparrow Oral LD <sub>50</sub> :	41 mg/kg
48-hour Honey Bee Contact LD <sub>50</sub> :	0.078 µg/bee	48-hour Honey Bee Oral LD <sub>50</sub> :	0.0039 µg/bee

Data on Lambda-Cyhalothrin Technical:

96-hour LC <sub>50</sub> Bluegill:	0.00021 ppm	Bobwhite Quail 8-day Dietary LC <sub>50</sub> :	>5,300 ppm
96-hour LC <sub>50</sub> Rainbow Trout:	0.00024 ppm	Mallard Duck 8-day Dietary LC <sub>50</sub> :	>3,948 ppm
48-hour EC <sub>50</sub> Daphnia:	0.00036 ppm	Mallard Duck LC <sub>50</sub> :	3,950 mg/kg
Honey Bee Oral LD <sub>50</sub> :	0.038 µg/bee		

**Environmental Fate:**

Hydrolysis half-life of imidacloprid is greater than 30 days at pH 7 and 25°C. The aqueous photolysis half-life is less than 3 hours. The soil surface photolysis of imidacloprid has a half-life of 39 days, and in soil, the half-life ranged from 26 to 229 days. Lambda-Cyhalothrin is moderately persistent in the soil. The reported half-lives range from 4 to 12 weeks. It shows a high affinity for soil with a reported Koc of 180,000. Lambda-Cyhalothrin has extremely low water solubility and is tightly bound to soil.

**SECTION 13 DISPOSAL CONSIDERATIONS**

**Waste disposal procedures:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, 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 the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**Container Disposal:** Nonrefillable container. Do not reuse or refill this container. If empty: Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor (including toilet) or outdoor (including sewer) drain.

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**SECTION 14 TRANSPORTATION INFORMATION**

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this MSDS.

**USDOT:** <882 pounds per completed package:  
UN 3349, Pyrethroid pesticide, solid, toxic, 6.1, III, (lambda cyhalothrin)  
≥882 pounds per completed package:  
UN 3349, Pyrethroid pesticide, solid, toxic, 6.1, III, (lambda cyhalothrin), Marine Pollutant

**IMDG:** UN 3349, Pyrethroid pesticide, solid, toxic, 6.1, III, (lambda cyhalothrin), Marine Pollutant

**IATA:** UN 3349, Pyrethroid pesticide, solid, toxic, 6.1, III, (lambda cyhalothrin), Marine Pollutant

**SECTION 15 REGULATORY INFORMATION**

**U.S. Federal Regulations:**

**TSCA Inventory:** This product is exempted from TSCA because it is solely for FIFRA regulated use.

**SARA Hazard Notification/Reporting:**

**Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):**

Immediate and Delayed

**Section 313 Toxic Chemical(s):**

None

**Reportable Quantity (RQ) under U.S. CERCLA:**

None

**RCRA Waste Code:**

None

**State Information:**

Other state regulations may apply. Check individual state requirements.

**California Proposition 65:** Not Listed.

**SECTION 16 OTHER INFORMATION**

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS 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.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

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