

**SECTION 3 – HAZARDS IDENTIFICATION**

Potential Health Effects:

- a. Relevant route of exposure: Ingestion
- b. Adverse health effects from exposure to product or ingredients of product:
  - i) Length of Exposure : Death if sufficient quantity is ingested.
  - ii) Severity of Effect : Motor nervous system is stimulated. If a sufficient quantity is ingested this may result in cardiac arrest.
  - iii) Target Organ : The organ effected would be an over stimulated heart.
  - iv) Type of Effect : Cardiac arrest due to over stimulated heart.
  - v) Signs and symptoms of ingestion:

**SECTION 4 – FIRST AID MEASURES**

If accidental exposure is suspected:

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

If on Skin: Wash with soap and water. If irritation persists call a doctor.

If inhaled: This product is a granular solid. Inhalation of the product is not likely.

- If ingested: i) Call a poison control center or doctor for treatment advice.  
 ii) Have person sip a glass of water if able to swallow.  
 iii) Do not induce vomiting unless told to do so by the poison control center or doctor.

Note to Physician : The active ingrédient in this product, 4-Aminopyridine, is a potassium channel blocker which increases activity in the motor nervous system. It is administered orally to treat humans suffering from Multiple Sclerosis and other nervous system disorders.

Medical conditions likely to be aggravated by exposure :

**Acute Effects of Overexposure:** There is no human specific data available *for these products*. The acute oral toxicity for this product, as formulated, ranges from an LD-50 of about 700 mg/kg for some avian species to an LD-50 of about 6,500 mg/kg for white rats. Laboratory animals, when administered toxic doses of the formulation exhibited evidence of nervous system effects such as loss of motor control, uncoordination anxiety, tremors, and involuntary convulsions followed, in some cases by death.

**Chronic Effects From Overexposure:** There are no known chronic effects of exposure to this product. However, persons Handling large quantities of these products who are allergic to grain and grain dust should anticipate similar allergic réactions.

**SECTION 5 – Fire Fighting Measures**

1. Flash Point and Method: Not applicable.
2. Upper and lower flammable (explosive) limits in air : UFL & LFL not applicable. This is a non-volatile solid.
3. Autoignition température : No known Fire or Explosion hazard. Grains will burn at higher temperatures.
4. Hazardous combustion products : Burning may produce any number of toxic products including but not limited to carbon dioxide, carbon monoxide, chlorine and hydrogen chloride.
5. Conditions under which flammability would occur. Fire or extreme heat.
6. Extinguishing methods : Dry Chemical, CO<sub>2</sub>, Foam, Water
7. Sensitivity to explosion by mechanical impact : None
8. Sensitivity to explosion by static discharge: None.
9. Fire fighting procedures: Do not breathe smoke or vapors; isolate fire; wear full protective clothing and self-contained breathing apparatus.

**SECTION 6 – ACCIDENTAL RELEASE MEASURES:**

Procedures for dealing with a release or Spill : Isolate and post spill area. Wear prescribed protective clothing and equipment. Keep unprotected persons and animals out of the spill area. Keep material out of lakes, streams, and sewer. If unadulterated, product may be repackaged in original container for use. If adulterated, shovel waste into an approved drum, sweep area thoroughly and wipe down with wet cloth or towels and dispose of as specified in SECTION 13.

**SECTION 7 – HANDLING AND STORAGE:**

- a. Handling practices and equipment: Applicators shall wear gloves and use a scoop when mixing, applying and broadcasting this product. FOLLOW ALL LABEL REQUIREMENTS.
- b. Appropriate storage practices/requirements: Keep out of reach of children and animals. Do not contaminate water, food or feed by storage or disposal. Store in original container only. Store apart from food or animal feed and protect against rodent penetration of the carton. Store apart from other pesticides, fertilizers, food or feed that may cause cross-contamination of odor or insect infestation. Wash exposed body areas before eating, drinking, smoking and before going to other intermediate tasks during the workday. Shower at the end of each workday. FOLLOW ALL LABEL REQUIREMENTS.

**SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION:**

- a. Applicable control measures, including engineering controls: Accumulation of grain dust may result in explosive mixtures. When handling and/or blending these products with untreated grains, provide ventilation to prevent accumulation of dust.
- b. Personal protective equipment for each exposure route: Applicators shall wear gloves and use a scoop when mixing, applying and broadcasting this product. FOLLOW ALL LABEL REQUIREMENTS. Good practice indicates wearing long sleeved shirt and long pants. **Work Clothing:** Avoid contact with clothing. Wear a long sleeved uniform, coveralls, or lab jacket when handling or blending these products with untreated grains. **Eye and Respiratory Protection:** Because of grain dust allergies, persons handling these products may consider wearing chemical protective goggles and a NIOSH/MSHA approved dust and mist respirator. **Gloves:** Persons handling these products must wear gloves and use a scoop. **Label Requirements:** Comply with all label requirements.

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	Whole or cracked corn
Odor	None
Boiling Point	Not applicable
Vapor Pressure (mm Hg.)	Not applicable
Vapor Density (Air = 1)	Not applicable
Specific Gravity (H <sub>2</sub> O = 1)	Not applicable
Melting Point	Not applicable
Evaporation Rate (Butyl Acetate = 1)	Not applicable
pH	Not applicable
% Volatiles	Not applicable
Solubility in H <sub>2</sub> O	Insoluble

**SECTION 10 – STABILITY AND REACTIVITY**

- a. Chemical stability: Many years
- b. Conditions to avoid: Moisture, odors, insect infestation and adulteration with other products.  
SEE PRODUCT LABEL.
- c. Incompatibility with other materials: This product is quite stable. Cross contamination with other items may render it unfit for its intended purpose. Avoid water, excessive heat, fire, chemicals. Burning may produce toxic by-products including but not limited to carbon dioxide, carbon monoxide, chlorine and hydrogen chloride.
- d. Hazardous decomposition products: Product is stable. See SECTION 5 – 4) above.
- e. Hazardous polymerization: Will not occur.

**SECTION 11 – TOXICOLOGICAL INFORMATION**

- a. Effects of short-term exposure: None unless ingested or in eyes. Ingestion can be fatal. This product is an acute oral toxicant. If in eyes, eyes will be irritated.
- b. Effects of long-term exposure: None unless ingested, in eyes (see immediately above) or held on skin for long periods (skin may be irritated).
- c. Irritancy: If any usually mild.
- d. Sensitization: None observed.
- e. Carcinogenicity: None.
- f. Reproductive toxicity: None observed.
- g. Teratogenicity: None observed.
- h. Mutagenicity: None observed.
- i. Name of toxicologically synergistic products: None known.

**SECTION 12 – ECOLOGICAL INFORMATION**

This pesticide is toxic to birds and fish. Wildlife feeding on treated bait may be killed. Do not contaminate water by cleaning equipment or disposal of waste. When in soil, active ingredient in this pesticide is tightly held by the soil matrix and will be decomposed by soil microbes.

**SECTION 13 – DISPOSAL CONSIDERATIONS**

FOLLOW LABEL REQUIREMENTS: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of law. If these wastes cannot be disposed of by use according to label instructions, contact Federal, Province or local control authority for proper instructions.

**SECTION 14 – TRANSPORT INFORMATION**

**DOT** – Not regulated.

**UN** – Not regulated.

**PIN** (Transport Canada – Product identification number) for the entire product: No known special sensitivities. Do not contaminate product or allow product to contaminate other products. No special handling required.

**SECTION 15 – REGULATORY INFORMATION**

a. WHMIS classification for product: This product is a pesticide with an active ingredient, 4-Aminopyridine, that is a Very Toxic Material which would carry a WHMIS Health Effects Criteria of D1A, due to acute oral toxicity. However, the active ingredient is present at a percentage wt./wt. of less than one percent.

b. To the best of preparer's knowledge this MSDS has been prepared to meet the requirements of the Canadian Controlled Products Regulation.

**MATERIAL SAFETY DATA SHEET****SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

<b>a. Product Identifier – Avitrol Corn Chops -</b>		CD PCPA Reg. No. 12095
<b>Avitrol Whole Corn -</b>		CD PCPA Reg. No. 12096
Active Ingredient:	4-Aminopyridine;	Synonyms: 4-AP;
Chemical Family:	Pyridines; AND	Formula C <sub>5</sub> H <sub>6</sub> N <sub>2</sub>

**b & c. Name of manufacturer/supplier, address and emergency telephone number:**

Avitrol Corporation, 7644 E. 46<sup>th</sup> Street. Tulsa, OK 74145, USA  
918-622-7763; 800-424-9300; 703-527-3887

**d. Product Use:** Bird Control**e. Date of MSDS preparation:** January 6, 2015**f. Name and telephone number of party responsible for MSDS preparation:** Tasheena Dillingham

Regular Telephone Number: 918-622-7763  
Emergency Telephone Numbers (Chemtrec): 800-424-9300 or 703-527-38874

**SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS**

**a. Chemical identity and CAS of registry no. of hazardous ingredients (WHMIS Controlled Products) present at 1.0%, or 0.1% as appropriate, by weight:** - 4-Aminopyridine present at 0.5%; disclosure threshold is 1.0%

**b. Ingredients present which are on the WHMIS Ingredient Disclosure List at, or above, the minimum concentration specified on the List:** - NONE

**c. Ingredients with unknown toxicological properties:** - NONE

**d. Ingredients the supplier believes may be harmful:** -4-Aminopyridine at 0.5%

**e. Generic chemical identity, registry number, and date of claim for trade secret ingredients registered under the HAZARDOUS Materials Information Review Commission:** - NONE

**f. Ingredient concentration in units of wt./wt. or wt./vol. expressed as; I) actual concentration, or II) a range as specified in the Controlled Product Regulations:**

Ingredient Name	CAS #	OSHA-PEL	ACGIH-TLV	OTHER	wt./wt. %
4-Aminopyridine	504-24-5	NONE	NONE	NONE	0.50
Whole or Cracked Corn	NONE	NONE	NONE	NONE	33.16

**g. LD 50s AND OR LC 50s for ingredients:** - 4-Aminopyridine is the only toxicant and it is toxic to all vertebrates. It is an acute oral toxicant and it is present in this product at 0.5% wt./wt. The acute oral LD 50 for this chemical ranges from about 3.5 mg/kg to about 32.5 mg/kg. As formulated the acute LD 50's for this 0.5% product range from about 700 mg/kg to about 6.500 mg/gk.

**h. Exposure limits:** None Established

