

MATERIAL SAFETY DATA SHEET # 11649-A REV 9

Date Prepared: June 15, 1998

Manufacturer's/Preparer's Name Avitrol Corporation, 7644 E. 46th Street. Tulsa, OK 74145

Emergency/Regular Telephone Number 918-622-7763  
In case of poisoning call - Poison Control Center 800-764-7661

PRODUCT NAMES (as shown on labels):

Avitrol Wheat<sup>†</sup> - EPA Reg. No. 11649 - 1; Avitrol Sorghum<sup>†</sup> - EPA Reg. No. 11649 - 3;  
Avitrol Mixed Grains - EPA Reg. No. 11649 - 4; Avitrol Corn Chops - EPA Reg. No. 11649 - 6; AND  
Avitrol Whole Corn - EPA Reg. No. 11649 - 7

<sup>†</sup> These products have been discontinued.

SECTION I - PRODUCT INFORMATION

Active Ingredient 4-Aminopyridine: Synonyms 4-AP;  
Chemical Family Pyridines; AND Formula C<sub>5</sub>H<sub>6</sub>N<sub>2</sub>-CL

These products are formulations of 0.5% 4-aminopyridine hydrochloride impregnated grains. The 99.5% inerts consists of one of the above grains. These products contain no Volatile Organic Compounds.

SECTION II - PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance Grain  
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 III - HAZARDOUS INGREDIENTS "†": NON-HAZARDOUS INGREDIENTS "††"

Ingredient Name	CAS #	OSHA-PEL	ACGIH-TLV	OTHER	%
4-Aminopyridine - CL <sup>†</sup>	504-24-5	NONE	NONE	NONE	0.50
Grain <sup>††</sup>	NONE	NONE	NONE	NONE	99.50

SECTION IV - FIRE AND EXPLOSION HAZARD

Flash Point: Not Applicable  
Flammable Limits: UFL AND LFL Not Applicable  
Extinguishing Media: Dry Chemical, CO<sub>2</sub>, Foam, Water  
Degree of Fire/Explosion Hazard: No Known Fire or Explosion hazard. Grains will burn at higher temperatures.  
Special Fire Fighting Procedures: Do not breathe smoke or vapors; isolate fire; wear full protective clothing and self-contained breathing apparatus.  
Stability: Stable  
Hazardous Polymerization: Will not occur.  
Incompatibility/Conditions to Avoid: Water, excessive heat, fire, chemicals. Burning may produce toxic by-products.  
Hazardous Decomposition Products: Burning may produce any number of toxic products including but not limited to carbon dioxide, carbon monoxide, chlorine and hydrogen chloride.

SECTION V - HEALTH HAZARD DATA

Primary Routes of Entry: Acute effects from overexposure may result from ingestion.

Acute Effects of Overexposure: There is no human specific data available. The acute oral toxicity of these products, as packaged, ranges from an LD-50 of about 700 mg/kg for some avian species to an LD-50 of about 6500 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 overexposure to these products. However, persons handling large quantities of these products who are allergic to grain and grain dust should anticipate similar allergic reactions.

**Medical Conditions Which Might Be Aggravated by Exposure:** Other than grain allergies, none presently known.

**Carcinogenicity:** NTP: No IRAC: No OSHA: No

SECTION VI - EMERGENCY AND FIRST AID PROCEDURES

**Eyes:** Avoid contact with eyes. If in eyes, flush with plenty of water. Get medical attention if irritation persists.

**Skin:** Wash thoroughly with soap and water after handling.

**Inhalation:** Not applicable.

**Ingestion:** If one of these products is swallowed: **If the Patient is Unconscious:** Maintain breathing and heart beat (CPR - Cardiopulmonary resuscitation). Contact your local Poison Control Center, hospital or physician immediately. **If the Patient is Conscious:** Induce vomiting with syrup of Ipecac (If not available, stimulate the back of the throat with finger). Never give anything by mouth to an unconscious person. Contact your local Poison Control Center, hospital or physician immediately.

SECTION VII - EMPLOYEE PROTECTIVE REQUIREMENTS

**Ventilation:** Accumulation of grain dust can result in explosive mixtures. When handling and/or blending these products with untreated grains, provide ventilation to prevent accumulation of dust.

**Work Clothing:** Avoid contact with clothing. Although not required by the label, wearing a long sleeved uniform, coveralls or lab jacket is suggested 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:** Because of grain dust allergies, persons handling these products may consider wearing chemical protective gloves, surgical gloves or regularly washed cotton gloves.

SECTION VIII - STORAGE, SPILL AND WASTE DISPOSAL PROCEDURES

**Storage Instructions:** 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.

**Handling Instructions:** 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.

**Spill or Leak:** 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 packaged in original container for use. If adulterated, shovel waste into an approved drum, sweep area thoroughly and wipe down with wet cloth or towels.

**Disposal Instructions:** Because acceptable methods of disposal may vary by location and because regulatory requirements may change, the appropriate regulatory agencies should be contacted prior to disposal of adulterated product, sweepings and wipe down cloths.

SECTION IX - SHIPPING DESCRIPTION

DOT - Not Regulated. UN - Not Regulated.