

# MATERIAL SAFETY DATA SHEET # 11649-F REV 10

Date Prepared: March 16, 2007

Manufacturer's/Preparer's Name

Avitrol Corporation, 7644 E. 46th Street. Tulsa, OK 74145

Regular Telephone Number

918-622-7763

Emergency Telephone Numbers (Chemtrec)

800-424-9300 or 703-527-3887

## PRODUCT NAMES (as shown on labels):

Avitrol Powder Mix-

EPA Reg. No. 11649 - 11

## SECTION I - PRODUCT INFORMATION

Active Ingredient  
Chemical Family

4-Aminopyridine;  
Pyridines; AND

Synonyms  
Formula

4-AP;  
C<sub>5</sub>H<sub>6</sub>N<sub>2</sub>

This product is a formulation of 50.0% 4-aminopyridine and 50.0% inerts. The 50% inerts consist of natural human food. This product contains no Volatile Organic Compounds.

## SECTION II - PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance	White to light tan powder
Odor	Slight Characteristic odor
Boiling Point	274 Degrees Centigrade
Vapor Pressure (mm Hg.)	Unknown
Vapor Density (Air = 1)	Unknown
Specific Gravity (H <sub>2</sub> O = 1)	Not Applicable
Melting Point	155 to 158 Degrees Centigrade
Evaporation Rate (Butyl Acetate = 1)	Not Applicable
pH	Not Applicable
% Volatiles	None
Solubility in H <sub>2</sub> O	Inerts soluble: AI 7.6 g /100cc @20 degrees C

## SECTION III - HAZARDOUS INGREDIENTS "†": NON-HAZARDOUS INGREDIENTS "††"

Ingredient Name	CAS #	OSHA-PEL	ACGIH-TLV	OTHER	%
4-Aminopyridine <sup>†</sup>	504-24-5	NONE	NONE	NONE	50.00
Inerts <sup>††</sup>	NONE	NONE	NONE	NONE	50.00

## SECTION IV - FIRE AND EXPLOSION HAZARD

Flash Point (4AP):	164 Degrees C
Flammable Limits:	Unknown
Extinguishing Media:	Dry Chemical, CO <sub>2</sub> , Foam, Water
Degree of Fire/Explosion Hazard:	No Known Fire or Explosion hazard.
Special Fire Fighting Procedures:	Do not breathe smoke or vapors; isolate fire; avoid skin contact; wear full protective clothing and self- contained breathing apparatus.
Stability:	Stable
Hazardous Polymerization:	Will not occur.
Incompatibility/Conditions to Avoid:	Acids, oxidizing agents, and sodium nitrite.
Hazardous Decomposition Products:	Burning may produce any number of toxic products including but not limited to carbon dioxide, carbon monoxide, nitrous oxides, ammonia and hydrogen cyanide.

## SECTION V - HEALTH HAZARD DATA

Primary Routes of Entry: Ingestion, inhalation, eye and skin contact .

Acute Effects of Overexposure: There is no human specific data available. However, 4AP is known to be highly toxic to all forms of vertebrate life tested. Acute oral L-50's for the formulation as packaged, for species tested, range from about 7.6 mg/kg for house sparrows to about 40 mg/kg for white rats. Laboratory animals, when administered toxic (lethal) doses of the formulation exhibited evidence of nervous system effects such as loss of motor control, uncoordination, anxiety, tremors, and involuntary convulsions followed by death.

**Inhalation:** This material is irritating to the nasal and respiratory tracts. Absorption can occur from the gastrointestinal tract, skin and respiratory tract. Symptoms include nausea, irritability, elevated blood pressure, weakness, convulsions, respiratory distress and possible death.

**Skin Contact/Absorption:** This material is considered to be a skin irritant. Although 4-AP is not absorbed through the skin as readily as some other aminopyridines, it should still be considered toxic by this route. Wear protective clothing including long sleeves and gloves. Extended exposure (e.g. saturated clothing) may lead to irritation and/or systemic poisoning. Extra care should be used to prevent skin contact. Symptoms of systemic poisoning include those listed above.

**Eyes:** This material is irritating to the eye and eyelids. It is considered to be a severe eye irritant. Use extra caution to prevent exposure and possible damage to the eyes. Although not required by the label, persons using this product are encouraged to wear chemical goggles or other suitable eye protection.

**Ingestion:** This material is highly toxic via the oral route (see above) to all vertebrates. Two reported cases of 4-AP human poisoning resulted in the following: disagreeable taste, burning of the throat, upset stomach, irritability, dizziness, seizures, disorientation and metabolic acidosis.

Chronic Effects From Exposure --- None Known: Medical Conditions Aggravated by Exposure --- None Known.

Carcinogenicity: NTP -- No: IRAC -- No: OSHA --No.

#### **SECTION VI - Emergency and First Aid Procedures**

**If in Eyes:** Flush with plenty of water. Get Medical attention if irritation persists.

**If on Skin:** Wash thoroughly with soap and water. Get Medical attention if irritation persists.

**If Inhaled:** Remove to fresh air immediately. If breathing has stopped, give artificial respiration. Get medical attention.

**If Swallowed: If Patient is Unconscious,** maintain breathing and heart beat (CPR: Cardiopulmonary resuscitation and administration of oxygen). 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 Poison Control Center, hospital or physician immediately.

#### **SECTION VII - EMPLOYEE PROTECTIVE REQUIREMENTS**

**Ventilation:** All operations should be conducted in well ventilated areas.

**Work Clothing:** Applicators must wear protective clothing, including long sleeves and gloves.

**Eye and Respiratory Protection:** Protective goggles and a NIOSH/MSHA approved dust and mist respirator should be worn.

**Gloves:** Persons handling these products should wear 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, place waste into an approved drum, sweep area thoroughly and wipe down with wet cloth or towels.

**Disposal Instructions:** Follow label directions.

#### **SECTION IX - SHIPPING DESCRIPTION**

SHIPPING NAME:	Poisonous solid, n.o.s. (50% 4-aminopyridine UN#2671)
HAZARD CLASS:	Poison 6.1
IDENTIFICATION NUMBER:	UN # 2811
LABELS REQUIRED:	POISON 6.1
REPORTABLE QUANTITY:	2,000 POUNDS

#### **SECTION X - HIMS HAZARD POSTING**

HIMS: Health - 3; Flammability - 0; Reactivity - 1; Other - 0.