



2030 Powers Ferry Road, Suite 500
Atlanta, GA 30339



Material Safety Data Sheet

Date: November 29, 2005

Section 1 – Chemical Product and Company Identification

Product Name: AMDRO® Bug Bait Identifier: EPA REG. No. 8119-5-73342		Product ID #: PIN:
Distributor: Ambrands 2030 Powers Ferry Road, Ste. 500 Atlanta, GA 30339	Manufacturer: Matson, LLC. PO Box 1820 North Bend, WA 98045	Emergency Telephone Numbers: 1-800-858-7378 1-800-265-0761 (U.S.A.) 1-800-424-9300 (CHEMTREC)
Proper Shipping Name: Agricultural Insecticide, NOI, solid.		
NFPA Rating: Health = 1; Fire = 0; Reactivity = 0		

Section 2 – Composition/Information on Ingredients

Hazardous Components	Percent in Product	CAS #	OSHA PEL	ACGIH TLV
Metaldehyde	2	9002-91-9	Not Determined	Not Determined
Carbaryl	5	63-25-2	5 mg/m3	5 mg/m3

Section 3 - Health Hazard Data

Route(s) of Entry:	Inhalation? Yes	Skin? Yes	Ingestion? Yes
<p>Health Effects: Metaldehyde:</p> <p>Eye Contact: May cause irritation. Skin Contact: Repeated or prolonged skin contact may cause irritation. Inhalation: Avoid breathing dusts. Ingestion: This product contains Metaldehyde 2%. Non-Human Toxicology Data (For pure Metaldehyde): Rat Oral LD50: 630 mg/kg Dog Oral LD50: 250 mg/kg Rat Dermal LD50: > 5000 mg/kg Ames Test: Not mutagenic LC50 Rainbow Trout: 75 mg/l</p>			
Carcinogenicity: No data for Metaldehyde.	NTP: No Data	IARC Monographs: None for Metaldehyde.	OSHA Regulated: See Section 2

Signs and Symptoms of Exposure: Metaldehyde over-dosage results in lethargy, severe abdominal pain, nausea, vomiting, diarrhea, hyperthermia, seizures, coma and death. Other effects have included renal tubular injury and liver necrosis. Onset is generally 1 to 3 hours.

Preexisting Conditions Aggravated by Exposure: Liver, kidney and nervous system

Health Effects-Carbaryl

Eye Contact: May cause irritation.

Skin Contact: Repeated or prolonged skin contact may cause irritation.

Inhalation: Avoid breathing dusts.

Ingestion: This product contains carbaryl 5%.

Non-Human Toxicology Data (For pure carbaryl):

Rat Oral LD50: 230 mg/kg Mouse oral LD50: 128 mg/kg

Rat Dermal LD50: 4000 mg/kg Ames Test: Not mutagenic

LC50 Pimephales promelas (fathead minnows) 31 days old 9.47 mg/l/96 hr at 24.2 deg C,

Carcinogenicity:

NTP: No Data

IARC Monographs:
Group 3: Not classifiable.

OSHA Regulated:
See Section 2

Signs and Symptoms of Exposure: Carbaryl : Clinical manifestations. 1. Nausea, vomiting, abdominal cramps, diarrhea, and excessive salivation (sialorrhoea) and sweating. 2. Lassitude and weakness. 3. Rhinorrhoea and a sensation of tightness in the chest may occur with respiratory exposures. 4. Blurring or dimness of vision, miosis (with fixed pinpoint pupils), tearing, ciliary muscle spasm, loss of accommodation, and ocular pain. None of these eye signs, however, is dependable for diagnosis. Mydriasis may be seen secondary to sympathoadrenal discharge. 5. Loss of muscle coordination, slurring of speech, fasciculations and twitching of muscles. 6. Difficulty in breathing, excessive secretions of saliva and of respiratory tract mucus, oronasal frothing, cyanosis, pulmonary rales and rhonchi, and hypertension (presumably due to asphyxia). 7. Random jerky movements, incontinence, convulsions, and coma. 8. Death primarily due to respiratory arrest of central origin, paralysis of the respiratory muscles, intense bronchoconstriction, or all three. (HSDB)

Preexisting Conditions Aggravated by Exposure: Respiratory and nervous system. Cumulative toxin.

Emergency and First Aid Procedures:

If Swallowed: Call 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.

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 On Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If In Eyes: Hold eye open and rinse slowly and gently with water for 15-20 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.

Note to physician – This product contains both metaldehyde and carbaryl, a cholinesterase inhibitor. According to HSDB for oral exposure to life-threatening levels of **Metaldehyde** and **Carbaryl**: gastric lavage should be considered, if the procedure can be performed within one hour of ingestion. This procedure should be performed cautiously due to the possibility of convulsions, which are most likely to occur one hour or later after ingestion of metaldehyde. Activated charcoal slurry (30 g charcoal per 240 ml water) may be administered, with the usual dose of 25 to 100 g in adults and adolescents, 25 to 50 g in 1 to 12 year old children, and 1 g/kg in infants under 1 year old. For **Carbaryl intoxication** HSDB recommends: Atropine sulfate in repeated doses intravenously until atropinization is achieved (indicated by drying of pulmonary secretions). 1. Adult dose- 2 to 4 milligrams every 10 to 15 minutes. 2. Child - 0.05 milligram/kilogram every 10 to 15 minutes. Administer pralidoxime if severe toxicity develops. Treat moderate to severe poisoning (fasciculations, muscle weakness, respiratory depression, coma, seizures) with 2-PAM in addition to atropine; most effective if given within 48 hours, but has had efficacy up to 6 days. May require administration for several days. Initial dose: a. Adult: 1 to 2 g in 100 to 150 ml 0.9%. Child: 20 to 50

mg/kg as a 5% solution IV over 30 min. b. Repeat these doses in 1 hour and then every 6 to 12 hours if muscle weakness or fasciculations persist, or begin continuous infusion as a 2.5% solution in 0.9% saline. Adult: 500 mg/hour. Child: 9 to 19 mg/kg/hour. **For Seizures** from either agent administer a benzodiazepine IV; diazepam, (Adult: 5 to 10 mg, repeat every 10 to 15 min as needed. child: 0.2 to 0.5 mg/kg, repeat every 5 min as needed) or Lorazepam (Adult: 2 to 4 mg; Child 0.05 to 0.1 mg/kg). 1. Consider phenobarbital if seizures recur after diazepam 30 mg (adults) or 10 mg (children > 5 years). 2. Monitor for hypotension, dysrhythmias, respiratory depression, and need for endotracheal intubation. Evaluate for hypoglycemia, electrolyte disturbances and hypoxia.

Section 4 - Fire and Explosion Hazard Data - Product

Flammability	Yes	Special Fire Fighting Methods:	None
Conditions of Flammability: Dusts may ignite explosively.			
Extinguishing Media: CO2, Foam, Dry chemical, Water			
Flash Point	Not Applicable	Upper Flammable Limit	Not Applicable
Unusual Fire Hazards	Not Applicable	Lower Flammable Limit	Not Applicable
Auto ignition Temperature (°C)	Not Applicable	Explosion Data	Not Applicable
Sensitivity to Impact	Not Applicable	Sensitivity to Static Discharge	Not Applicable

Section 5 - Physical/Chemical Characteristics

Physical State	meal	Specific Gravity (H ₂ O = 1)	Not Available
Vapor Pressure (mm Hg. @ 25C)	11.03 *	Melting Point	246C*
Vapor Pressure (mm Hg. @ 25C)	3.9710 ⁻⁵ **	Melting Point	145C**
Vapor Density (AIR = 1)	6.06 *	Evaporation Rate	Not Available
Vapor Density (AIR = 1)	Not Available		Not Available
Boiling Point	115 C *	Odor Threshold (mg/m3)	0.025 *
Boiling Point	decomposes**	Odor Threshold (mg/m3)	Odorless**
pH	Not Available	Oct./H2O partition coefficient	2.36**
Freezing point	Not Available	Solubility in Water (13 C) *	12% *
Freezing point	Not Available	Solubility in Water (20 C) *	120 mg/l **
Appearance	Tan meal	Odor	Grain
Notes: * For pure Metaldehyde ** For pure Carbaryl			

Section 6 - Reactivity Data

Conditions to Avoid: Heat. Decomposition of pure Metaldehyde above 97 F. Decomposes to acetaldehyde and paraldehyde and further to acetic acid and acids. Carbaryl: When heated to decomposition it emits toxic fumes of nitroxides

Stability	Stable	Hazardous Polymerization	Will Not Occur
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Incompatibility (Materials to Avoid): Metaldehyde: Oxidizing agents, acids, bases. Carbaryl: Incompatible with alkaline materials such as Bordeaux mixture, lime, and lime sulfur

Hazardous Decomposition or Byproducts: Metaldehyde: carbon oxides, aldehydes. Toxic gases and vapors such as oxides of nitrogen, methylamine, and carbon monoxide may be released in a fire involving carbaryl.

Section 7 – Personal Protection

Respiratory Protection: Not needed for outdoor use. For spill or dusts use proper dust respirator.

Protective Gloves: Impervious gloves **Eye Protection** Avoid eye contact. Use safety glasses.

Other Protective Clothing: Overalls or long pants and shirts as needed.

Section 8 – Accidental Release Measures

Spill Response: Sweep, don't wash. Wet floors become slippery. Take care not to generate dusts during sweeping. Wear protective gloves, eyewear and clothing. Use care not to contaminate area-use appropriate labeled containers. Follow appropriate OSHA (29 CFR 1910.120), State and local regulations.

Waste Disposal Method: Follow Federal, State and local laws. Do not reuse containers.

Section 9 – Special Precautions / Handling

Storage Precautions: Store in cool, dry, locked area without direct sunlight in original container. Prevent exposure to children or pets. Avoid contamination of feed, seed, fertilizers and foodstuffs.

Work/Hygienic Practices: Avoid contact with eyes, skin or clothing. Avoid breathing dust. Clean contaminated clothing before reuse. Avoid vapors in closed areas-use respirator with charcoal canister.

Section 10-Transportation Requirements

DOT Classifications: Hazard Class: None U.S. Surface Freight Class: Agricultural Insecticide NOI	DOT Proper Shipping Label Not Regulated Package Group: None Label Code: None	DOT Placard: Not Applicable UN Number: None Regulations: 49CFR
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Section 11-Other Information

Disclaimer Notice: The information in this MSDS was obtained from current and reliable sources. The data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond the control of Matson, LLC, it is the responsibility of the user both to determine safe conditions for the use of this product and to assume liability for loss, damage or expense arising out of the improper use due to statements or omission in this MSDS. Various Governmental agencies (e.g. DOT, EPA, FDA etc.) may have specific policies concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in this MSDS. The user should review these regulations to insure full compliance.

Prepared by Skinner Associates-Consultants in Toxicology. (805) 238 1096. E-mail: skinal@tcsn.net 9/03