MATERIAL SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: ATGARD® (dichlorvos) Swine Wormer
Product No.: NADA 043-606
MSDS ID#: 043-606
GHS Product Identifier: Not applicable

Synonyms: ATGARD V-22
Molecular Formula: Mixture, not applicable
Molecular Weight: Not applicable
CAS Number: Mixture, not applicable
Chemical Family: Organophosphate ester (active ingredient)

Manufacturer:
Boehringer Ingelheim Vetmedica, Inc.
2621 North Belt Hwy
St. Joseph, MO 64506-2002

Emergency Telephone:
Transportation Emergency: (800) 424-9300

Medical Emergency (24HR): (866) 638-2226

Non-emergency Telephone: (800) 821-7467

Intended Use: Highly effective anthelmintic recommended for the removal and control of the sexually mature (adult), sexually immature, and/or 4th state larvae of the whipworm (*Trichuris suis),* nodular worms (*Oesophagostomum spp.),* large roundworms (*Ascaris suum),* and the mature thick stomach worms *(Ascarops strongylina)* occurring in the lumen of the gastrointestinal tract of pigs, boars, and open or bred gilts and sows.

2 HAZARDS IDENTIFICATION

Emergency Overview

Physical State: Uncoated, rice-shaped resin pellet-approximately 1/18 inch in length and 1/16 inch in diameter. 0.40 oz (11.2 g) package and 1.92 oz (54.6 g) package
Color: Clear
Odor: Mild chemical odor

WARNING!
Contains an ORGANOPHOSPHATE PESTICIDE.
The additives are encased in a tough plastic matrix-Exposure to Dichlorvos is unlikely.
Not for human use – FOR SWINE USE ONLY.
Toxic if swallowed.
Toxic to aquatic life with long lasting effects.

Precautionary Statements:
Keep only in original container.
Keep at a temperature not exceeding 26.6° C.
Do not eat, drink or smoke while using this product.
Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco.
Wear protective gloves and clothing appropriate for exposure.
Fire-fighting: Use foam, carbon dioxide, dry powder and water fog or material appropriate for surrounding fire.
Spills: Clean up spill immediately. Vacuum spilled material into waste containers. Do NOT wash away into waterways and sewer. Use appropriate containment to avoid environmental contamination. Avoid release to the environment. Dispose of this container to hazardous or special collection point. This material and its container must be disposed of in a safe way.
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
If swallowed, seek medical advice immediately and show this container or label. Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
Keep out of reach of children.
Keep away from food, drink, and animal feedstuffs except per label instructions.
Do not handle until all safety precautions have been read an understood.

Description:
Atgard® Swine Wormer is designed to be administered to swine in limited amounts of a meal-type (non-pelleted ration). When used according to the directions, the active ingredient (dichlorvos) release rate is sufficient to provide for high anthelmintic efficiency but not of such magnitude as to exceed the degrading (detoxification) capacity of the pig. This characteristic provides a wide margin of safety comparable to or exceeding many drugs used in the field of animal health.
When Atgard® Swine Wormer is used as part of a regular parasite treatment program in young growing pigs and in breeding stock on a given farm, it becomes an important management factor by gradually lowering the overall parasite exposure rate and subsequent infection levels.
The preparation, as recommended, has been shown to be palatable to swine of all ages. Under extensive laboratory testing and field conditions of use, complete acceptability has been observed. This characteristic affords the following advantages: 1) Treatment time corresponds directly to normal feed consumption time. No pre-conditioning is required, such as overnight fasting and/or

water withdrawal. 2) It allows for the treatment of younger pigs which frequently resist unpalatable drinking water medications.

The preparation is designed to be mixed into a dry meal or crumble-type rations. The product cannot be adequately mixed into pelleted feeds nor should it be used in liquid or semi-liquid rations. The contents of the two (2) packet sizes provide for a single anthelmintic treatment for the number of pigs in various weight classes and for breeding swine (see label).**The user should acquaint himself thoroughly with the contents of the package insert.**

Acute effect:

Dichlorvos is a cholinesterase inhibitor. Symptoms of exposure include weakness, tightness in chest, sweating, vomiting, non-reactive pin point pupils, tearing, blurred vision, frequent urination, salivation, headache, mental confusion, nausea, abdominal cramps and diarrhea.

Precautions/Contraindications: Do not use in animals other than swine. Do not allow fowl access to feed containing this preparation or in to manure from treated animals. Do not use this product on animals simultaneously or within a few days before or after treatment with or exposure to cholinesterase inhibiting drugs, pesticides or chemicals. Do not allow swine access to feed other than that containing the preparation until treatment is complete, after which normal feeding should be resumed. Preconditioning swine by overnight fasting is not necessary or recommended. Do not treat swine with signs of increased intestinal peristalsis (diarrhea, scours) until these signs subside or are brought under control by proper medication. Consult your veterinarian for assistance in the diagnosis, treatment and control of parasitism.

There is no pre-slaughter withdrawal period when used at the recommended dose level.

Overdosage: ORGANOPHOSPHATE PESTICIDE: Seek Medical or Veterinarian Attention Immediately.

ADVERSE REACTIONS TO PRODUCT: Causes reduction in blood cholinesterase levels, leukocytosis, neutrophilia, and a decrease in lymphocytes and monocytes. Can cause pulmonary edema, coma and death.

Potential Health Effects

Inhalation: Not expected to be an inhalation hazard in final drug preparation form.

Eye Contact: Not expected to be an eye hazard in final drug preparation form

Skin Contact: Not expected to be a skin hazard in final drug preparation form.

Ingestion: Toxic if swallowed. Call a physician or poison control center immediately.

Chronic Health Effects: Chronic effects are not expected when used as directed. Occasionally a delayed syndrome "OPIDN-Organophosphate-induced delayed neuropathy" may result from organophosphate exposure. Possible Carcinogen.

Target Organ(s): Central Nervous System, Cardiovascular System

Potential Physical Effects: Headache, sweating, nausea and vomiting, diarrhea, loss of coordination and death for human exposure.

OSHA Regulatory Status: Exempt, Regulated as a veterinarian drug in final form.

Environment: Marine pollutant

3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	EC No.	CAS- No.	Concentration	EU Classification	GHS
Dichlorvos(21%): 2,2-dichlorovinyl dimethyl phosphate	2005477	62-73-7	21% by weight	T, N, R24/25, R26, R43, R50	Hazard Category 3
Dioctyl adipate	2030901	103-23-1	proprietary	----	----
Polyvinyl chloride resin	----	9002-86-2	proprietary	----	----

*EC Reference No.
The full texts for all R-Phrases are displayed in Section 16.

4 FIRST AID MEASURES

General: Animals or persons developing anaphylactic (life-threatening) reactions, such as difficulty in breathing or unconsciousness, must receive immediate medical attention.

Inhalation: If symptomatic, move to fresh air. Get medical attention if symptoms persist.

Eye Contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist.

Skin Contact: Wash with soap and water. Get medical attention if symptoms occur.

Ingestion: Call a physician or poison control immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

Note to Physician: For animal use only. Not for human use. **Emergency Treatment:** Atropine is the specific therapeutic antagonist of choice against parasympathetic nervous stimulation. If there are signs of parasympathetic stimulation atropine sulfate should be injected at ten minute intervals, in doses of 1-2 milligrams until complete atropinization has occurred. **Morphine, adrenaline or tranquillizers are contraindicated.** Pralidoxime chloride (2-PAM chloride) may also be used as an effective antidote in addition to and while maintaining full atropinization. In adults, an initial dose of 1 gram of 2-PAM should be injected, preferable as an infusion of 250cc of saline over a 15-30 minute period. 2-PAM may also be administered slowly by in by intravenous injection as 5% solution in water over not less than two minutes. After about an hour, a second dose of 1 gram of 2-PAM will be indicated if muscle weakness has not been relieved. For infants and children the dose of 2-PAM is 0.25 grams.

5 FIRE-FIGHTING MEASURES

Extinguishing Media: Extinguish with foam, carbon dioxide, dry powder and water fog or material appropriate for surrounding fire.

Unsuitable Extinguishing Media: None known

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.

Unusual Fire & Explosion Hazards: Toxic gases may be generated under fire situations.

Hazardous Combustion Products: Phosphorous oxides, hydrogen chloride, carbon monoxide, and dichlorvos vapor

Flammability Class: 0

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate personal protective equipment for risk of exposure. See Section 8.

Spill Cleanup Methods: Small Spill: Sweep up and place in a clearly labeled container for waste.
Large Spill: Wear an approved respirator, eye protection, personal protective coverings and gloves. Use HEPA filtered vacuum or wet sweeping to clean up spillage. Place spillage in appropriate container for waste disposal Wash contaminated clothing before use.

Environmental Precautions: Use appropriate containment to avoid environmental contamination. Prevent runoff from entering drains, sewers or streams. Dike for later disposal.

7 HANDLING AND STORAGE

Handling: Do not taste or swallow. Wash hands thoroughly after handling.

Storage: Keep only in the original container. Keep container closed. Do not store unused packet(s) contents or medicated feed. Store at temperatures not exceeding 26.6°C (80°F). Store in a dry place. Store locked up Keep out of reach of children. Keep away from food, drink, and animal feedstuffs except per label instructions.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

For Industrial Exposures:

Exposure Limits:

Chemical Name	Source	Type	Exposure Limits	Notes
Dichlorvos, Inhalable fraction and vapor	ACGIH	8-HR TWA	.1 mg/m^3	Skin designation, sensitizer,

				cholinergic
Dichlorvos	NIOSH	REL	1 mg/ m^3	Skin
Dichlorvos	NIOSH	IDLH	100 mg/ m^3	---
Dichlorvos	OSHA Z-1	PEL	1 mg/ m^3	Skin
Dichlorvos	California	8-HR TWA	1 mg/ m^3	Skin designation
Dichlorvos	Mexico	TWA	1.5 mg/ m^3	---
Dichlorvos	Alberta	8-HR TWA	.9 mg/ m^3	Skin designation
Dichlorvos (DDVP), Inhalable, vapor and aerosol	British Columbia	8-HR TWA	.1 mg/ m^3	Skin designation, capable of causing respiratory, dermal or conjunctival sensitization.
Dichlorvos (DDVP), Inhalable, vapour and aerosol	Ontario	8-HR TWA	.1 mg/ m^3	Can be absorbed through the skin.
Dichlorvos	Quebec	8-HR TWA	.9 mg/ m^3	Skin designation
DDVP, S. Dichlorvos	Austria	TWA	1 mg/ m^3	Special danger of skin absorption
Dichlorvos	Belgium	8-HR TWA	.9 mg/ m^3	Skin designation
Dichlorvos	Denmark	TWA	1 mg/ m^3	Substance can be absorbed through the skin
Diklorvossi	Finland	8-hr limit	1 mg/ m^3	----
Dichlorvos	France	TWA (VME)	1 mg/ m^3	Considered to be a danger of subcutaneous penetration under French Occupational Exposure Limits
Dichlorvos (ISO)	Germany	Limit Value	1 mg/ m^3	Skin Indicator : H cutaneous absorption
Dichlorvos (DDVP)	Greece	8-HR TWA	1 mg/ m^3	Skin designation
2,2-Dichlorovinyl dimethyl phosphate	Iceland	8-HR TWA	1 mg/ m^3	Skin designation
Dichlorvos (ISO)	Ireland	8-HR TWA	1 mg/ m^3	Irish skin designation
Dichlorvos (DDVP), Inhalable fraction and vapor	Italy	8-HR TWA	.1 mg/ m^3	Can be absorbed through the skin
Dichloorvos	Netherlands	MAC TWA (TGG)	1mg/ m^3	MAC Danger of cutaneous absorption
Diklorvos	Norway	TLV	1mg/ m^3	Skin absorptive substance
Dichlorvos	Portugal	8-HR Limit	.1 mg/ m^3	Skin absorption

				possible
Diclorvós	Spain	VLA-ED	0.91 mg/ m^3	
Dichlorvos	Switzerland	TWA	1 mg/ m^3	Skin absorption possible
Dichlorvos	Australia	TWA	.9 mg/m^3	Skin designation
Polyvinyl chloride resin	OSHA	TWA	1 ppm	Skin hazard; Cancer suspect agent
Polyvinyl chloride resin	OSHA	Action Level	0.5 ppm	----
Polyvinyl chloride, total dust	British Columbia	8-HR TWA	5 mg/m^3	----
Polyvinyl chloride (PVC), respirable dust	Ireland	8-HR TWA	4 mg/m^3	----
Polyvinyl chloride (PVC), total inhalable dust	Ireland	8-HR TWA	10 mg/m^3	----
Respirable PVC-Stof	Netherlands	MAC TWA (TGG)	1 mg/ m^3	----
Damm, PVC respirabelt damm	Sweden	Level limit value (NGV)	.05 mg/ m^3	----
Damm, PVC total damm	Sweden	Level limit value (NGV)	1 mg/ m^3	----
Polyvinyl chloride	Switzerland	TWA	3 mg/m^3	----
Polyvinyl chloride, inhalable dust	UK	TWA	10 mg/m^3	----
Polyvinyl chloride, respirable dust	UK	TWA	4 mg/m^3	---

Engineering Controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits, if needed.

Respiratory Protection: Not generally required when handling pellets or containers. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Wear a mask or pesticide respiratory jointly approved by the Mine, Safety and Health Administration and NIOSH and US EPA.
In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA standard 63 FR 1152, January 8, 1998. Respirator type: NIOSH approved organic vapor respirator.

PERSONAL PROTECTIVE EQUIPMENT: If containers are compromised:

Eye Protection: No special precautionary measures should be needed under anticipated conditions of use.

Hand Protection: Gloves

Skin Protection: No special precautionary measures should be needed under anticipated conditions of use.

Hygiene Measures*:* Washing facilities

9 PHYSICAL AND CHEMICAL PROPERTIES

Color: Clear
Odor: Mild chemical odor
Odor Threshold: No data available
Physical State: Uncoated, rice-shaped resin pellet-approximately 1/18 inch in length and 1/16 inch in diameter. 0.40 oz (11.2 g) package and 1.92 oz (54.6 g) package
pH: No data available
Melting Point: No data available
Freezing Point: No data available
Boiling Point: No data available
Flash Point: Noncombustible
Flammability Limit – Upper (%): Not applicable
Flammability Limit – Lower (%): Not applicable
Evaporation rate: No data available
Vapor Pressure: No data available
Vapor Density (Air=1): No data available
Specific Gravity: 1.2
Solubility: < 1 %
Partition Coefficient (n-Octanol/water): No data available
Autoignition Temperature: Not applicable
Decomposition Temperature: No data available

10 STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: Moisture, heat

Incompatible Materials: Strong oxidizing agents, strong acids. Will hydrolyze in water.

Hazardous Decomposition Products: Hydrogen chloride and other toxic fumes

Possibility of Hazardous Reactions: Will not occur.

11 TOXICOLOGICAL INFORMATION

Specified Substances

Extensive field and laboratory trials with various formulations of dichlorvos have shown that this preparation, as recommended, is safe to use. The wide margin of safety is comparable to or exceeds most drugs used in the field of animal health.

Acute Toxicity

Chemical Name	Test Results
2,2-Dichlorovinyl dimethyl ester phosphoric acid	Oral LD_{50} (male rat): 80 mg/kg Oral LD_{50} (female rat): 56 mg/kg Oral LD_{50} (mouse): 61 mg/kg Oral LD_{50} (wild bird species): 12 mg/kg Dermal LD_{50} (mouse) : 206 mg/kg Dermal LD_{50} (rabbit) : 205 mg/kg Inhalation LC_{50} (rat): 15 mg/m^3 4H Inhalation LC_{50} (mouse) : 13 mg/m^3 4H

Reproduction:

Atgard® Swine Wormer at recommended dosages to breeding swine has been shown to have no adverse side effects on reproduction. It does not cause abortion or premature births, impaired fertility, fewer pigs per litter, or decreased litter survival performance.

Teratogenicity: Weakly teratogenic when administered intraperitoneally to rats at dose levels that were maternally toxic. No effects on percent pregnant, number of fetal implants or number of early fetal deaths were observed in female mice exposed with 25 to 50 mg/kg orally or 2 or 8 µg/L by inhalation.

Listed Carcinogens:

Chemical Name	IARC	NTP	OSHA	ACGIH
Dichlorvos	2B	Not Listed	Not Listed	Not Listed
Polyvinyl chloride resin	Not listed	Not Listed	Cancer-Suspect Agent	Not Listed

12 ECOLOGICAL INFORMATION

Ecotoxicity:

Chemical Name	Test Results
2,2-Dichlorovinyl dimethyl ester phosphoric acid	LC_{50} (fat head minnow): 11.6 mg/L LC_{50} (bluegill): .9 mg/L

Persistence and degradability: Dichlorvos has low persistence in soil. Volatilization from moist soils is expected to be low. Dichlorvos degrades primarily by hydrolysis, with a half-life of approximately 4 days in lakes and rivers.

Mobility in soil: Dichlorvos does not absorb to soil particles and it is unlikely to contaminate groundwater.

Other adverse effects: UV light makes dichlorvos 5-150 times more toxic to aquatic life. Dichlorvos does not significantly bioaccumulate in fish. Dichlorvos is a marine pollutant.

Germany WGK: Dichlorvos: ID No: 632; Class: 3: severely water-endangering; Adipinsāuredi-2-ethylhexylester: ID No: 626, Class 1: slightly water-endangering.

13 DISPOSAL CONSIDERATIONS

General Information: Pesticide wastes are toxic. Dispose of in accordance with local, state and federal regulations. Contact State Pesticide, Environmental Control Agency or hazardous waste representative at the nearest EPA Regional Office.

Disposal Methods: Dispose according to label instructions.-**Unused contents and feed containing Atgard® Swine Wormer should be buried 18 inches deep in the ground and covered in a manner rendering it unavailable to man, animals or fowl.** Do not empty into drains. Do not contaminate water, food, or feed by storage disposal.

Container: Since emptied containers retain product residue, follow label warnings even after container is emptied. Do not reuse package.

14 TRANSPORT INFORMATION

(Dichlorvos is regulated as a veterinarian drug in final form in this formulation; not as a pesticide)

DOT: Not regulated
Marine Pollutant: Severe: Dichlorvos

TDG: Not regulated
Marine Pollutant: Severe: Dichlorvos

ADR/RID: Not regulated
Marine Pollutant: Severe: Dichlorvos

IATA: Not regulated
Marine Pollutant: Severe: Dichlorvos

IMDG: Not regulated
Marine Pollutant: Severe: Dichlorvos

15 REGULATORY INFORMATION

Canadian Controlled Products Regulations: This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all required information.
WHMIS Classification: Exempt

Inventory Status

This material is **not** listed on the US TSCA Inventory. Dichlorvos is registered under EPA/FIFRA.
This material is **not** listed on the DSL Inventory.

US Regulations

FDA (Food and Drug Administration): Dichlorvos is listed under special provisions and is regulated as an animal drug in this formulation. (CFR Title 21, Volume 6: Subpart B: Specific New Animal Drugs for use in Animal Feeds).

CERCLA Hazardous Substance List (40 CFR 302.4):

Component	Reportable Quantity
Dichlorvos	10 lbs.

Section 311/312 (40 CFR 370):

X	Acute (Immediate)	X	Chronic (Delayed)		Fire		Reactive		Pressure Generating

Section 313 Toxic Release Inventory (40 CFR 372):

Component	CAS No.	Concentration
Dichlorvos	62-73-7	21

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): Dichlorvos: Quantity Code- A; Reportable Quantity: 10 lbs.

Pesticide Chemical Tolerances (40 CFR 180, Subpart C): Dichlorvos

U.S. EPA PC Code: 084001

EPA Toxicity Class: Dichlorvos: 1

State Regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This product contains the following ingredients for which the state of California has found to cause cancer, birth defects, or other reproductive harm, which would require a warning under the statute: Dichlorvos-Carcinogen;
Massachusetts Right-To-Know List: DDVP-Neurotoxin; Bis (2-ethylhexyl) adipate
Minnesota Hazardous Substances List: Dichlorvos (DDVP)-Skin designation;
New Jersey Right-To-Know List: Dichlorvos-Substance No. 0674; PVC (Chloroethylene, polymer); Bis (2-ethylhexyl) adipate
Pennsylvania Right-To-Know List: Phosphoric acid, 2, 2-Dichloroethenyl dimethyl ester, Bis (2-ethylhexyl) adipate
Rhode Island Right-To-Know List: Dichlorvos-T-Skin;

European Regulations

EU Candidate list of endocrine disruptors and classifications (Commission Report establishing a priority list of endocrine disruptors, Annexes 1, 13, and 15, M036608/1786Q/10/11/00, 11 Nov 2000): Chemical number in Annex 9:227, Group III.

Classification for wildlife: 3, Classification for humans: 3, Combined classification 3 (No evident scientific basis)- Dioctyl Adipate
Switzerland Toxins List 1: Dichlorvos: Toxicity Category: 2, 1482; Adipinsaeure-bis-(2-aethylhexyl)-ester: Toxicity Category: 4, G-1882
Denmark MAL Code: Polyvinylchloride: 0 m^3 / 10g substance
France. Table of work-related illnesses (Les maladies Professionnelles), as amended through JORF, n. 302, 20107, 30 Dec 2006.
Norway List of Dangerous Substance (Stoffliste) on the classification, labeling, etc. of dangerous chemicals: 2, 2 –diklorvinyldimetylfosfat
Norway. Observation List of Chemicals 2002. Obs-listen: Miljøvernmyndighetenes liste over helse-og miljøfarlige stoffer man skal være spesielt oppmerksom på. State of the Environment Norway, STF 2002. Bis(2-ethylheksyl)heksandioat (dioktylodipat)
United Kingdom: Dichlorvos: Schedule 1; Annual reported level threshold is 10 kilograms; Releases to water: Annual reporting level threshold is 0.5 grams; Releases to sewer: Annual reporting level threshold is 0.5 grams.

16 OTHER INFORMATION

Hazard Ratings

	Health Hazard	Fire Hazard	Reactivity Hazard
HMIS	1*	0	0

	Health Hazard	Fire Hazard	Reactivity Hazard	Special Hazard
NFPA	1	0	0	N/A

*- Chronic health effect; 0 – Minimal; 1 – Slight; 2 – Moderate; 3 – Serious; 4 – Severe

For Dichlorvos:
T- Toxic
N- Dangerous to the environment
R24/25 – Toxic in contact with skin and if swallowed.
R26 – Very toxic by inhalation.
R43 – May cause sensitization by skin contact.
R50 – Very toxic to aquatic organisms.
S1/2 – Keep locked up and out of reach of children
S28- After contact with skin, wash immediately with plenty of water.
S36/37 – Wear suitable protective clothing and gloves.
S45 – In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S62 – If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

ABBREVIATIONS:
BIV - Boehringer Ingelheim Vetmedica, Inc.
AIHA- American Industrial Hygiene Association
mppcf – million particles/cubic foot
N/A - Not applicable
N/E - Not established

References:

1. ATGARD® Swine Wormer Label. Boehringer Ingelheim Vetmedica, Inc.
2. ATGARD® Swine Wormer. Product Reference Information. Boehringer Ingelheim Vetmedica, Inc.
3. Ariel WebInsight Regulatory Database. Regulatory Summary for North America, Western Europe, and Global Inventories Database. Dichlorvos.
4. CFR, Title 21, Volume 6. Food and Drug Administration- Part 558.3: New Animal Drugs for use in Animal Feeds, Subpart B: Specific New Animal Drugs for use in Animal Feeds, 588.205: Dichlorvos.
5. 49 CFR 171.4(c)
6. GHS Manual
7. EXTOXNET. Extension Toxicology Network. Pesticide Information Profiles. June 1996. www.extoxnet.orst.edu/pips/dichlorv.htm
8. New Jersey Hazardous Substance Fact Sheet. Dichlorvos. New Jersey Department of Health and Senior Services. April 2003
9. PAN Pesticide Database – Chemicals. www.pesticideinfo.org/Detail_Chemical.jsp?Rec_Id=PC33362
10. RTECS – Dichlorvos. RTECS No. TC0350000.

Revision Information: New MSDS
Prepared by: Boehringer Ingelheim Vetmedica, Inc.
Issue Date: 06/13/07
Supercedes Date: 3/29/05