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1. IDENTIFICATION

Product name: ACEPHATE 90 PRILL

Chemical name of active ingredient(s): Acephate: O,S-Dimethyl acetylphosphoramidothioate

Makhteshim Agan of North America, Inc. 4515 Falls of Neuse Road, Suite 300

Raleigh, NC 27609 Phone: 919-256-9300

For fire, spill, and/or leak emergencies, contact

Infotrac:

Acephate

For medical emergencies and health and safety

inquiries, contact Prosar:

Phone: 1-800-535-5053

Phone: 1-877-250-9291

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO. % OSHA PEL ACIGH TLV OTHER (Carcinogen)
30560-19-1 90 NE NE NE NE NA

NE=not established NA=not available

COMMON NAME

3. HAZARDS IDENTIFICATIONS

PHYSICAL PROPERTIES

APPEARANCE: White prills. **ODOR:** Rotten cabbage like.

EMERGENCY OVERVIEW: CAUTION Harmful if swallowed. Causes eye irritation. Avoid contact with eyes, skin, and clothing. Avoid breathing dust or spray mist. Wash hands thoroughly after handling. Do not allow children to come into contact with treated areas until sprays have dried.

HAZARDOUS DECOMPOSITION PRODUCTS: Noxious gases when exposed to alkaline materials. Thermal decomposition may produce oxides of sulfur, nitrogen and phosphorous.

PRIMARY ROUTES OF EXPOSURE: Ingestion, inhalation, skin and eye contact.

SYMPTOMS OF EXPOSURE:

EYE - Contact may cause eye irritation. Degree of injury will depend on the amount of material that gets into eye and the speed and thoroughness of the first aid treatment.

SKIN - Prolonged or repeated skin contact may cause irritation. The systemic toxicity has not been determined.

INHALATION - Mist or dust concentrations may be harmful or irritating if inhaled. Signs and symptoms of respiratory tract irritation may include nasal discharge, sore throat, coughing, bronchitis, pulmonary edema and difficulty in breathing.

INGESTION - This material may be harmful if swallowed. Degree of injury will depend on amount ingested. Signs and symptoms which may occur within 12 hours following overexposure include headache, dizziness, weakness, pinpoint pupils, blurred vision, excessive salivation and nasal discharge, abdominal cramps, nausea and vomiting.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing cholinesterase depression.

4. FIRST AID MEASURES

FIRST AID

Contains an organophosphate that inhibits cholinesterase.

IF SWALLOWED: • Call a poison control center or doctor immediately for treatment advice.

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.

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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.
IF ON SKIN OR	Take off contaminated clothing.
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
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.
Have the product container or label with you when calling a poison control center or doctor, or going for	

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact Prosar at 877-250-9291 for 24 hour emergency medical treatment information.

NOTE TO PHYSICIAN: Acephate is a cholinesterase inhibitor. If signs of cholinesterase inhibition appear, atropine is antidotal. 2-PAM may also be used in conjunction with atropine but should not be used alone.

5. FIRE FIGHTING MEASURES

FLASH POINT: Not applicable. **FLAMMABLE LIMITS:**

LFL/UFL: Not applicable.

EXTINGUISHING MEDIA: Use foam, carbon dioxide, or water spray when fighting fires involving this material.

HAZARDOUS DECOMPOSITION PRODUCTS: Noxious gases when exposed to alkaline materials. Thermal decomposition may produce oxides of sulfur, nitrogen and phosphorous.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Material will not burn or explode under normal conditions. Dusts at sufficient concentrations could form explosive mixtures with air.

FIRE-FIGHTING PROCEDURES: Evacuate area and fight fire from a safe distance. Minimize the amount of water used for fire fighting. Water runoff can cause environment damage. Dike and collect water used to fight fire. Decontaminate personal protective equipment and fire fighting equipment before reuse. Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: Clean up spill immediately, observing precautions as described in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Vacuum or sweep up material and place in a properly labeled disposal container. Large spills may be neutralized with dilute solutions or soda ash or lime. After removal, flush contaminated area thoroughly with water. Do not allow any material to run off into soil, drainage systems, or bodies of water. Notify and consult with proper regulatory authorities.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Use only in a well-ventilated area. Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Open dumping is prohibited.

PRECAUTIONS TO BE TAKEN IN STORAGE: Keep pesticide in original container. Do not put concentrated or dilute into food or drink containers. Store in a cool, dry place. Protect from excessive heat. Do not contaminate food or foodstuffs. Do not store or transport near feed or food.

STORAGE TEMPERATURES (MIN/MAX): Normal ambient temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

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FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

SKIN PROTECTION: Wear long-sleeved shirt and long pants, socks with shoes.

HAND PROTECTION: Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.

RESPIRATOR REQUIREMENTS: A NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N, R, P, or HE filter

ADDITIONAL PROTECTIVE MEASURES: Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS:

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

EXPOSURE GUIDELINES: Refer to Section 2. **ENGINEERING CONTROLS:** Refer to product label.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL PROPERTIES

Appearance: White prills
Odor: Rotten cabbage like
FLASH POINT: Not applicable
MELTING POINT: 195° F (90° C)
DENSITY: 25-30 pounds/ft³
pH: 4.2 (when diluted with water)
WATER SOLUBILITY: 750 g/L @ 20° C

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal use and storage conditions.

CONDITIONS AND MATERIALS TO AVOID: High temperatures and excess moisture. Alkaline materials.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Noxious gases when exposed to alkaline materials. Thermal decomposition may produce oxides of sulfur, nitrogen and phosphorous.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES

 $\begin{array}{lll} \mbox{Acute Oral LD}_{50} \mbox{ (Rat):} & 1,030 \mbox{ mg/kg} \\ \mbox{Acute Dermal LD}_{50} \mbox{ (Rat):} & >10,000 \mbox{ mg/kg} \\ \mbox{Acute Inhalation LC}_{50} \mbox{ (Rat):} & >60 \mbox{ mg/L} \end{array}$

Eye Irritation (Rabbit): Minimally irritating.

Dermal Irritation (Rabbit): Minimally irritating.

Dermal Sensitization (Guinea Pig): Non-sensitizer.

MUTAGENIC DATA: Weak evidence of mutagenicity in tests performed in vitro and mice.

ADDITIONAL DATA: Repeated or prolonged low-level exposures to organophosphates may cause sensitization to subsequent exposures that mimic acute exposures.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This pesticide is toxic to birds. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Cover or soil-

MATERIAL SAFETY DATA SHEET

ACEPHATE 90 PRILL

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incorporate spills. Do not contaminate water when cleaning equipment or disposing of equipment wash waters. This product is highly toxic to bees exposed to drect treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

FISH TOXICITY: (Technical)

Rainbow trout, 96-hr LC50 >1,000 mg/L Bluegill, 96-hr LC50 >1,000 mg/L

AVIAN TOXICITY: (Technical)

Mallard duck, Oral LD50 350 mg/kg

BEE TOXICITY: Highly toxic

13. DISPOSAL CONSIDERATIONS

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.

PRODUCT DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

14. TRANSPORT INFORMATION

DOT CLASSIFICATION:

Not regulated

INTERNATIONAL TRANSPORTATION

IMO (vessel): Not regulated

IATA (air): Not regulated

15. REGULATORY INFORMATION

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.

Section 311/312: Acute health hazard (immediate)

Chronic health hazard (delayed)

Section 313: Acephate (90%) CAS #: 30560-19-1

CA PROPOSITION 65: Not applicable

CERCLA RQ: Not applicable

RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a bazardous waste.

TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or are exempt.

16. OTHER INFORMATION

MSDS DATE: 10-13-08. Supercedes version dated 3-28-07. Changes made to section 13.

The information herein is given in good faith, but no warrant, express or implied, is made. Consult Makhteshim Agan of North America, Inc. for further information.