1. IDENTIFICATION

**Product name:** Diazinon AG500

**Chemical name of active ingredient(s):** Diazinon: O,O-diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate

**Manufacturer/Registrant:** 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:
Phone: 1-800-535-5053

For medical emergencies and health and safety inquiries, contact Prosar:
Phone: 1-877-250-9291

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>CAS NO.</th>
<th>%</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>OTHER</th>
<th>NTP/IARC/OSHA (CARCINOGEN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diazinon</td>
<td>333-41-5</td>
<td>48</td>
<td>NE</td>
<td>0.1 mg/m3 (TWA)</td>
<td>NE</td>
<td>NA</td>
</tr>
<tr>
<td>Aromatic petroleum hydrocarbons</td>
<td>25551-13-7</td>
<td>39.2</td>
<td>NE</td>
<td>123 mg/m3 (TWA)</td>
<td>NE</td>
<td>NA</td>
</tr>
<tr>
<td>Contains:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Pseudocumene (1,2,4-trimethylbenzene)</td>
<td>95-63-6</td>
<td>9.0*</td>
<td>NE</td>
<td>123 mg/m3 (TWA)</td>
<td>NE</td>
<td>NA</td>
</tr>
<tr>
<td>m-Xylene</td>
<td>108-38-3</td>
<td>3.1*</td>
<td>435 mg/m3 (TWA)</td>
<td>434 mg/m3 (TWA)</td>
<td>NE</td>
<td>NA</td>
</tr>
<tr>
<td>o-Xylene</td>
<td>95-47-6</td>
<td>3.1*</td>
<td>435 mg/m3 (TWA)</td>
<td>434 mg/m3 (TWA)</td>
<td>NE</td>
<td>NA</td>
</tr>
</tbody>
</table>

*Amount in finished product.
NE=not established; NA=not available

3. HAZARDS IDENTIFICATIONS

**PHYSICAL PROPERTIES:**
Appearance: Amber liquid
Odor: Slight sulfur-like

**EMERGENCY OVERVIEW:** CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye injury. Avoid contact with eyes, skin, or clothing. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contamination of food and feed. Food utensils such as tablespoons and measuring cups should not be used for food purposes after use in measuring pesticides. Keep out of reach of domestic animals. Do not use on humans, household pets, or livestock. Do not contaminate ornamental fish ponds.

**SYMPTOMS OF ACUTE EXPOSURE:** Symptoms of cholinesterase inhibition can include headache, dizziness, blurred vision, weakness, nausea, cramps, diarrhea, discomfort in the chest, nervousness, sweating, miosis (pinpoint pupils), tearing, salivation, pulmonary edema, uncontrollable muscle twitches, convulsions, cyanosis, coma, and loss of reflexes and sphincter control. If swallowed and aspirated into the lungs, chemical pneumonia can occur. Exposure may result in eye and skin irritation.

**PHYSICAL OR CHEMICAL HAZARDS:** Combustible. Do not use, pour, spill, or store near heat or open flame.

**HAZARDOUS DECOMPOSITION PRODUCTS:** An impurity of toxicological concern, thiono-tetraethylpyrophosphate (O, S-TEPP) can be formed when diazinon-containing products are exposed to trace amounts of water.
UNUSUAL FIRE, EXPLOSION AND REACTIVITY HAZARDS: Forms flammable mixtures with air at temperatures above 106°F (41°C). This product is a NFPA Class II combustible liquid.

MEDICAL CONDITIONS LIKELY TO BE AGGRAVATED BY EXPOSURE: Exposure to cholinesterase inhibitors should be restricted in persons with hemolytic anemias or 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 by a poison control center or doctor.
- Do not give any liquid to the person.
- Do not give anything by mouth to an unconscious or convulsing person.

**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 INHALED:**
- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
- Call a poison control center or doctor for further 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.

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 1-877-250-9291 for emergency medical treatment information.

**NOTE TO PHYSICIAN:** This product is an organophosphate insecticide. If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine. This product contains petroleum distillates (xylene range aromatic solvent) which may pose an aspiration hazard. Vomiting may cause aspiration pneumonia. Gastric lavage may be indicated if product was taken internally.

5. FIRE FIGHTING MEASURES

**FIRE AND EXPLOSION**

**FLASHPOINT (Test Method):** 105°F (40.6°C)

**FLAMMABLE LIMITS (% in air):** Lower: NA; Upper: NA

**AUTOIGNITION TEMPERATURE:** >842°F

**UNUSUAL FIRE, EXPLOSION, AND REACTIVITY HAZARDS:** Forms flammable mixtures with air at temperatures above 106°F (41°C). This product is a NFPA Class II combustible liquid.

**EXTINGUISHING MEDIA:** Use dry chemical, foam, or CO₂ extinguishing media.

**FIRE-FIGHTING PROCEDURES:** Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes, or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated.

6. ACCIDENTAL RELEASE MEASURES

**IN CASE OF SPILLS OR LEAKS:** For small spills, cover the spill with an absorbent material such as pet litter. Sweep up and place in an approved chemical container. Wash the spill area with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up, and place in a chemical container. Seal the container and handle in an approved manner. Flush the area with water to remove any residue. Do not allow wash water to contaminate water supplies. Wear appropriate PPE (Section 8).

7. HANDLING AND STORAGE

**PRECAUTIONS TO BE TAKEN IN HANDLING:** Prevent eating, drinking, tobacco usage, and cosmetic application in areas where there is a potential for exposure to the material. Always wash thoroughly after handling.
PRECAUTIONS TO BE TAKEN IN STORAGE: Store in a dry place. Open dumping is prohibited. Store the material in a well-ventilated, secure area out of the reach of children and domestic animals. Do not store food, beverages, or tobacco products in the storage area.

STORAGE TEMPERATURE (MIN/MAX): Do not store above 106° F (41°C).

### 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.

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

EYE PROTECTION: Wear goggles, face shield, or safety glasses when engineering controls are not feasible.

SKIN PROTECTION: Long-sleeve shirt, long pants, shoes plus socks. Wear a chemical-resistant apron if exposed to concentrate.

HAND PROTECTION: Chemical-resistant gloves such as barrier laminate, butyl or nitrile rubber ≥14 mils, or Viton ≥14 mils (if mixing or loading).

RESPIRATOR REQUIREMENTS: Wear a respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter when engineering controls are not feasible.

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

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPEARANCE</td>
<td>Amber liquid</td>
</tr>
<tr>
<td>ODOR</td>
<td>Slight sulfur-like</td>
</tr>
<tr>
<td>MELTING POINT</td>
<td>Not applicable</td>
</tr>
<tr>
<td>BOILING POINT</td>
<td>374° F (190°C)</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY/DENSITY</td>
<td>1.00 g/cc @ 20°C</td>
</tr>
<tr>
<td>pH</td>
<td>6-8 (1% solution in H2O @ 25°C)</td>
</tr>
<tr>
<td>SOLUBILITY IN H2O</td>
<td>Diazinon: 60.0 mg/L @ 20°C</td>
</tr>
<tr>
<td>VAPOR PRESSURE</td>
<td>Diazinon: 1.20e-02 Pa @ 25°C</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

STABILITY: Stable
HAZARDOUS POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID: Flame, heat, ignition sources, strong oxidizers, acids, and bases.
HAZARDOUS DECOMPOSITION PRODUCTS: An impurity of toxicological concern, thiono-tetraethylpyrophosphate (O,S-TEPP) can be formed when diazinon-containing products are exposed trace amounts of water.

11. TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY/IRRITATION STUDIES**
- Acute Oral LD50 (Rat): 787 mg/kg body weight
- Acute Dermal LD50 (Rabbit): >2,000 mg/kg body weight
- Acute Inhalation LC50 (Rat): 1.68 mg/l air - 4 hours
- Eye Irritation: Mildly irritating (Rabbit)
- Dermal Irritation: Moderately irritating (Rabbit)
- Dermal Sensitization: A Skin Contact Sensitizer (Guinea Pig)

**MUTAGENIC POTENTIAL**
- Diazinon: None observed

**REPRODUCTIVE HAZARD POTENTIAL**
- Diazinon: None observed

**CHRONIC/SUBCHRONIC TOXICITY STUDIES**
- Diazinon: Cholinesterase inhibition

**CARCINOGENIC POTENTIAL:** Diazinon: None observed

**OTHER TOXICITY INFORMATION:** Not available

**TOXICITY OF OTHER COMPONENTS:**
- **Petroleum Solvent:** Low viscosity material - if swallowed may enter the lungs and cause lung damage. Swallowing may result in severe gastrointestinal irritation. On prolonged repeated contact, this material may defat the skin resulting in possible irritation and dermatitis. Respiratory irritation, dizziness, nausea, loss of consciousness.
- **Surfactant:** Causes severe eye irritation, which could lead to permanent eye damage. Prolonged or repeated skin contact may cause discomfort and local redness. Mist can irritate the respiratory tract, experienced as nasal discomfort and discharge with chest pain and coughing.

**TARGET ORGANS**
- **Active Ingredients:** Diazinon: Central nervous system.
- **Inert Ingredients:**
  - Petroleum Solvent: Respiratory tract, Central nervous system, Skin.
  - Surfactant: Eyes, Skin, and Respiratory tract.

12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL HAZARDS:** This product is highly toxic to birds, fish, and other wildlife. Birds, especially waterfowl, feeding or drinking on treated areas may be killed. Do not exceed maximum permitted label rates. Rates above those recommended significantly increase potential hazards to birds, especially waterfowl. Keep out of lakes, streams, ponds, tidal marshes, and estuaries. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where fish, shrimp, crab, and other aquatic life are important resources. Do not contaminate water by cleaning of equipment or disposal of equipment washwater. This pesticide is highly toxic to bees exposed to direct treatment or to residues on blooming crops or weeds. Do not apply this pesticide or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

**SUMMARY OF EFFECTS**

**ECO-ACUTE TOXICITY**
- **Diazinon:**
  - Rainbow Trout 96-hour LC50: 1.8 mg A.I./L.
  - Bluegill Sunfish 96-hour LC50: 0.21 mg A.I./L.
  - Daphnia magna 48-hour LC50: 0.0011 mg A.I./L.
  - Bobwhite Oral LD50: 5.2 mg/kg
  - Mallard Oral LD50: 1.44 mg/kg
  - Bobwhite 8-day Dietary LC50: 235 ppm
MATERIAL SAFETY DATA SHEET
Diazinon AG500
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Mallard 8-day Dietary LC50; 33 ppm A.I.

ECO-CHRONIC TOXICITY
Diazinon: Fish (Fathead minnow) Early Life Stage MATC; >0.092 and <0.17 mg/L
Invertebrate (Daphnia Magna) Life Cycle MATC; >0.00017 and <0.00032 mg/L
Mallard Reproduction NOEC; 100 ppm (ChE inhib. <5 ppm)
Bobwhite Reproduction NOEC; 40 ppm (ChE inhib. <10 ppm)

ENVIRONMENTAL FATE
Diazinon: No data available for the formulation. The information presented here is for the active ingredient, diazinon. A thorough review of environmental information is not possible in this document.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. To avoid harming aquatic organisms in rivers and other surface waters, do not pour the concentrate, spray mixture, or rinse water into sanitary drains (for example, street drains). If pesticide, spray mixture, or rinsate cannot be disposed of by use according to the label instructions, contact your local State Pesticide or Environmental Control Agency or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

PRODUCT 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:
- Non-bulk: NA 1993, RQ, Combustible liquid, N.O.S. (diazinon, xylene), PGIII.
- DOT Exception [49 CFR 173.150(f)(3)]: This exception eliminates requirement for placards (trucks) and hazard labels (packages).
  - The shipping description must appear on the shipping papers and on the 5-gallon Diazinon AG500 box.
  - A combustible hazard label is not required on the box.
  - Placards are not required on the truck.

INTERNATIONAL TRANSPORTATION:
- IATA (air): UN1993, RQ, Flammable liquid, N.O.S. (diazinon, Xylene), 3, PGIII

15. REGULATORY INFORMATION

SARA TITLE III CLASSIFICATION:
- SECTION 302: Not applicable
- SECTION 311/312:
  - Acute Health Hazard
  - Chronic Health Hazard
  - Fire Hazard
- SECTION 313 (chemicals):
  - Diazinon (CAS No. 333-41-5) 48%
  - 1,2,4-Trimethylbenzene (CAS No. 95-63-6) 9.0%
  - m-Xylene (CAS No. 108-38-3) 3.1%
  - o-Xylene (CAS No. 95-47-6) 3.1%

PROPOSITION 65: Not Applicable
CERCLA Reportable Quantity (RQ): 1.8 pints (Based on diazinon content [RQ= 1 lb.] in formulation)
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 hazardous waste. Ignitability D001
TSCA Status: The ingredients of this product are listed on the TSCA inventory or are exempt.
16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>HAZARD RATINGS</th>
<th>NFPA</th>
<th>HMIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH:</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>FLAMMABILITY:</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>REACTIVITY:</td>
<td>0</td>
<td>0</td>
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