

**FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300**

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**FORMULATED FOR:**

LOVELAND PRODUCTS, INC.  
P.O. Box 1286 • Greeley, CO 80632-1286

**24-Hour Emergency Phone:** 1-800-424-9300  
**Medical Emergencies:** 1-866-944-8565  
**U.S. Coast Guard National Response Center:** 1-800-424-8802

**PRODUCT NAME:** DIAZINON AG600 WATER-BASED CONCENTRATE INSECTICIDE  
**CHEMICAL NAME:** Diazinon; (O-O-diethyl O- (2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate)  
**CHEMICAL FAMILY:** Organophosphate Insecticide  
**EPA REG. NO.:** 66222-103-34704  
**MSDS Number:** 66222103-10-LPI      **MSDS Revisions:** Sections 1, 2, 4, 13      **Date of Issue:** 07/06/10      **Supersedes:** 10/15/07

**2. HAZARDS IDENTIFICATION SUMMARY**

**KEEP OUT OF REACH OF CHILDREN – CAUTION –** Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. Do not contaminate of food or 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 fishponds.

This product is an off-white liquid with slight sulfur-like odor.

**Warning Statements:**

**NOTE TO PHYSICIAN:** This product is an organophosphate (cholinesterase-inhibiting) insecticide. Atropine is antidotal and should be given in multiple doses as necessary until the patient is atropinized. 2-PAM is also antidotal, but should be administered only in conjunction with Atropine. Monitor serum and RBC cholinesterase. Morphine, theophylline, aminophylline, phenothiazines, reserpine, furosemide, or ethacrynic acid are contraindicated in organophosphate poisonings. Administer intravenous fluids cautiously, if needed, to correct dehydration. Symptoms of cholinesterase inhibition can include headache, dizziness, blurred vision, weakness, nausea, cramps, diarrhea, discomfort in the chest, nervousness, sweating, miosis, tearing, salivation, pulmonary edema, uncontrollable twitches, convulsions, coma, and loss of reflexes and sphincter control.

**3. COMPOSITION, INFORMATION ON INGREDIENTS**

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Diazinon	56.00	333-41-5	0.01 mg/m <sup>3</sup> (Skin)
Inert Ingredients	44.00		

This product is hazardous according to the OSHA Hazard Communication Standard (29 CFR 1910.1200)

**4. FIRST AID MEASURES**

**If swallowed:** Call a 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 a poison control center or doctor. Do not give anything by mouth to an unconscious or convulsing person.

**If in eyes:** Hold eye open and rinse slowly and gently with water 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 inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth. 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.

**FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565.** Have the product container or label with you when calling a poison control center or doctor or going for treatment.

**5. FIRE FIGHTING MEASURES**

**FLASH POINT (°F/Test Method):** 220°F/104.5°C (PMCC)  
**FLAMMABLE LIMITS (LFL & UFL):** None established  
**EXTINGUISHING MEDIA:** This product is water-based; use medium appropriate to surrounding fire. Dry chemical, carbon dioxide, foam, water spray or fog.

**HAZARDOUS COMBUSTION PRODUCTS:** Thermal decomposition products include, but are not limited to, various aliphatic organophosphates, substituted pyrimidines, and hydrogen cyanide.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained breathing apparatus with full protective clothing. Fight fire from upwind and keep all non-essential personnel out of area.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** If water is used to fight fire or cool containers, dike to prevent runoff contamination of municipal sewers and waterways.

**6. ACCIDENTAL RELEASE MEASURES**

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:**

Wear chemical safety glasses with side shields or chemical goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering, and a NIOSH-approved pesticide respirator or air-supplied respirator.  
 For small spills, absorb with an absorbent material such as pet litter. Sweep up and place in an approved chemical container for proper disposal. Check local, state and federal regulations for proper disposal. For large spills, contain liquid by diking the area, keep product out of water supplies. If possible use a pump to pick up liquid, then use absorbent material to absorb any residual liquid. Place both in an approved container. Flush the area with a household bleach and water mixture (1:1) and then absorb the liquid as described in small spills.

**CAUTION:** Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

**7. HANDLING AND STORAGE**

**HANDLING:** 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 after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Do not use, pour, spill or store near heat or open flame.

**STORAGE:** If freezing occurs, place the product in a warm room (68°F/20°C or above) and allow to thaw. Roll or shake container frequently until thawing is complete. Do not contaminate water, food or feed by storage or disposal.

**Personal Protective Equipment: Mixers, loaders, applicators and other handlers using engineering controls must wear:** long sleeved shirt and long pants, shoes plus socks, chemical resistant gloves if mixing or loading, and chemical resistant apron if mixing or loading. **Handlers performing tasks, such as cleaning equipment or spill clean-up for which engineering controls are not feasible must wear:** coveralls over long sleeved shirts and long pants, chemical resistant gloves, chemical resistant footwear plus socks, chemical resistant apron if exposed to concentrate, and a NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter. 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. Discard clothing and other absorbent material that has been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**RESPIRATORY PROTECTION:** Not normally required, if vapors or mists exceed acceptable levels, wear a NIOSH approved pesticide respirator.

**EYE PROTECTION:** Chemical goggles or shielded safety glasses.

**SKIN PROTECTION:** Wear protective clothing: long-sleeved shirts and pants, shoes with socks. Wear chemical-resistant gloves.

	<b>OSHA PEL 8 hr TWA</b>	<b>ACGIH TLV-TWA</b>
Diazinon	not listed	0.01 mg/m <sup>3</sup> (Skin)

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE AND ODOR:</b> Off-white liquid with slight sulfur-like odor.	<b>SOLUBILITY:</b> Slight
<b>SPECIFIC GRAVITY (Water = 1):</b> 1.07 g/ml	<b>pH:</b> 7-8 (1% solution)
<b>VAPOR PRESSURE:</b> <0.1 mm Hg @ 25°C	<b>BULK DENSITY:</b> 8.93 lbs/gal.
<b>PERCENT VOLATILE (by volume):</b> > 30%	<b>BOILING POINT:</b> Not established
<b>Note:</b> These physical data are typical values based on material tested but may vary from sample to sample.	<b>EVAPORATION RATE:</b> > 30% established
Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.	

**10. STABILITY AND REACTIVITY**

**STABILITY:** Stable

**INCOMPATIBILITY:** Strong bases, acids, and oxidizers.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition – aliphatic organophosphates, substituted pyrimidines, and hydrogen cyanide.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** Excessive heat and ignition sources.

**11. TOXICOLOGICAL INFORMATION**

<b>Acute Oral LD<sub>50</sub> (rat):</b> 1600 mg/kg	<b>Acute Dermal LD<sub>50</sub> (rabbit):</b> > 2020 mg/kg
<b>Eye Irritation (rabbit):</b> Causes irritation	<b>Skin Irritation (rabbit):</b> Non-irritating
<b>Inhalation LC<sub>50</sub> (rat):</b> >2.5 mg/L (4 hr)	<b>Skin Sensitization (Guinea Pig):</b> Not a sensitizer
<b>Carcinogenic Potential:</b> None listed in OSHA, NTP, IARC or ACGIH	

**12. ECOLOGICAL INFORMATION**

**Summary of Effects:** Diazinon is highly toxic to birds, fish, and other wildlife. Avoid exposure to waterfowl. Keep out of lakes, streams, ponds, tidal marches, 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 on the product label. Do not apply this product where fish, shrimp, crab, and other aquatic life are important resources. Do not contaminate water by cleaning of equipment or disposal of equipment wash waters. Highly toxic to bees exposed to direct treatment or to residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

# MATERIAL SAFETY DATA SHEET

# DIAZINON AG600 WBC

## Eco-Acute Toxicity

**96 HR LC<sub>50</sub>**

**48 HR LC<sub>50</sub>**

Rainbow Trout  
Bluegill Sunfish

1.8 mg A.I./L  
0.21 mg A.I./L

Daphnia Magna

0.0011 mg A.I./L

Bobwhite Oral LD<sub>50</sub>: 5.2 mg/kg  
Mallard Oral LD<sub>50</sub>: 1.44 mg/kg  
Bobwhite 8-day Dietary LC<sub>50</sub>: 235 ppm  
Mallard 8-day Dietary LC<sub>50</sub>: 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 10 ppm (ChE inhibition <5 ppm)  
Bobwhite Reproduction NOEC 40 ppm (ChE inhibition < 10 ppm)

## 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, toilets, floor drains, and sinks) or into storm water sewers (for example street drains). If pesticide, spray mixture, or rinsate cannot be disposed of by use according to the label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL: Non-refillable Container (five gallons or less):** Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then puncture and dispose of in a sanitary landfill, incinerate or burn, if allowed by state and local authorities. Stay out of smoke from burning container. **Non-refillable Container (greater than five gallons):** Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then puncture and dispose of in a sanitary landfill, incinerate or burn, if allowed by state and local authorities. Stay out of smoke from burning container. **Refillable Container:** Refillable container. Refill this container with Diazinon only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Do not contaminate water, food or feed by storage or disposal.

## 14. TRANSPORT INFORMATION

**DOT Shipping Description:** RQ ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, UN3082, III (DIAZINON) MARINE POLLUTANT ERG GUIDE 171

**U.S. Surface Freight Classification:** INSECTICIDES, INSECT REPELLENTS, NOI, OTHER THAN POISON (NMFC 102120, CLASS: 60)  
**Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.**

## 15. REGULATORY INFORMATION

### NFPA & HMIS Hazard Ratings:

NFPA

HMIS

1 Health

0 Least

1 Health

1 Flammability

1 Slight

1 Flammability

0 Instability

2 Moderate

0 Reactivity

3 High

H PPE

4 Severe

### SARA Hazard Notification/Reporting

#### SARA Title III Hazard Category:

Immediate

Y

Fire

N

Sudden Release of Pressure

N

Delayed

Y

Reactive

N

**Reportable Quantity (RQ) under U.S. CERCLA:** Diazinon (CAS: 333-41-5): 1 pound

**SARA, Title III, Section 313:** Diazinon (CAS: 333-41-5) 56.0%

**RCRA Waste Code:** Not listed

**CA Proposition 65:** Not listed.

## 16. OTHER INFORMATION

**MSDS STATUS:** Sections 1, 2, 4 and 13 revised

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental/ Regulatory Services

*This product is a RESTRICTED USE PESTICIDE due to Avian and Aquatic Toxicity*

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