

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: 1-800-301-7976
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: 66222103-07-LPI **MSDS Revisions:** Section 16 **Date Of Issue:** 10/15/07 **Supersedes:** 09/03/04

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION – Harmful if swallowed, inhaled or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. 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 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 ³ (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: **1-800-301-7976**. 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.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Off-white liquid with slight sulfur-like odor.

SPECIFIC GRAVITY (Water = 1): 1.07 g/ml

VAPOR PRESSURE: <0.1 mm Hg @ 25°C

PERCENT VOLATILE (by volume): > 30%

Note: These physical data are typical values based on material tested but may vary from sample to sample.

Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

BULK DENSITY: 8.93 lbs/gal.

BOILING POINT: Not established

EVAPORATION RATE: > 30%

SOLUBILITY: Slight
pH: 7-8 (1% solution)

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

Acute Oral LD₅₀ (rat): 1600 mg/kg

Eye Irritation (rabbit): Causes irritation

Inhalation LC₅₀ (rat): >2.5 mg/L (4 hr)

Carcinogenic Potential: None listed in OSHA, NTP, IARC or ACGIH

Acute Dermal LD₅₀ (rabbit): > 2020 mg/kg

Skin Irritation (rabbit): Non-irritating

Skin Sensitization (Guinea Pig): Not a sensitizer

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 LC₅₀

Rainbow Trout 1.8 mg A.I./L
Bluegill Sunfish 0.21 mg A.I./L

Daphnia Magna

48 HR 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
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 10 ppm (ChE inhibition <5 ppm)
Bobwhite Reproduction NOEC 40 ppm (ChE inhibition < 10 ppm)

13. DISPOSAL CONSIDERATIONS

Do not reuse product container. **Plastic:** Triple rinse (or equivalent), then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill, or, incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. 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: Section 16 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

Disclaimer and Limitation of Liability: This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS, Inc. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.