



MATERIAL SAFETY DATA SHEET

# Product: GOWAN DIAZINON 5G

Formulator: Gowan Company  
P.O. Box 5569  
Yuma, Arizona 85366-5569  
(520)783-8844

Emergency Phone: (520) 783-3803  
**For 24-Hour Emergency Assistance (Spill, Leak, Fire, or Exposure), Call CHEMTREC®:**

(520) 783-3803

**Inside the U.S.:** (800) 424-9300  
**Outside the U.S.:** (703) 527-3887  
(800) 225-5635 ext. 283

**For MEDICAL Emergency:**

## 1. CHEMICAL IDENTIFICATION

**Product:** Diazinon 5G  
**EPA Signal Word:** Caution  
**Active Ingredient:** Diazinon (5.0%)  
**Chemical Name:** O,O-diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate  
**Chemical Class:** Organophosphorous Pesticide  
**EPA Registration No.:** 10163-116  
**CAS No.:** 333-41-5

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	OSHA – PEL	ACGIH – TLV	OTHER	NTP/IARC/OSHA CARCINOGEN
Diazinon (5.0%)	0.1 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>	Not established	No

## 3. HAZARDS IDENTIFICATION

### Physical Properties

**Appearance:** Tan to light brown granules  
**Odor:** Mild garlic-type odor

### Symptoms of Over Exposure

May be harmful if swallowed or inhaled. Irritation of eyes, nasal passages, throat and skin. Signs and symptoms include those typical of organophosphate intoxication: Depression of cholinesterase activity, weakness, tightness in chest, headache, blurred vision, non-reactive pin-point pupils, nausea, vomiting, diarrhea, abdominal cramps, muscular fibrillation, convulsions, pulmonary edema, possible cardiac arrest and death. Severe intoxication is not likely from this product. Because this formulation contains silica, silicosis (a lung disease) may result. IARC (1987) has concluded there is sufficient evidence for carcinogenicity of crystalline silica in experimental animals, and limited evidence for carcinogenicity in humans.

### Medical Conditions Likely to be Aggravated by Exposure

Pre-existing depressed cholinesterase levels, persons with hemolytic anemia or under treatment with morphine, theophylline, aminophylline or phenothiazine drugs. Pre-existing lung, kidney, liver or gastrointestinal conditions.

### Primary Routes of Exposure

Harmful if ingested, inhaled, or if it comes into contact with eyes or skin.

### Hazardous Decomposition Products

CO, CO<sub>2</sub>, aliphatic organophosphates, substituted pyrimidines, HCN. S-TEPP and diazoxon may form when diazinon is reacted with trace amounts of water.

### Unusual Fire, Explosion, and Reactivity Hazards

Dusts may present explosion hazard.

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## 4. FIRST AID MEASURES

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If poisoning is suspected, immediately contact a physician, the nearest hospital, or the nearest Poison Control Center. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given.

**Ingestion:** Call a physician immediately. Drink one or two glasses of water and induce vomiting by touching back of the throat with finger. Repeat until vomit fluid is clear. Do not induce vomiting or give anything by mouth if person is unconscious or convulsing.

**Inhalation:** Remove victims to fresh air and apply artificial respiration if indicated.

**Eye Contact:** Rinse eyes with plenty of water and call a physician immediately.

**Skin Contact:** Wash promptly with soap and water. Rinse thoroughly. Get medical attention.

### 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. Give atropine 2-4 mg after cyanosis is overcome and repeat at 15 minute intervals until signs of atropinization appear. Do not give morphine or tranquilizers. Very close supervision of the patient is indicated for at least 48 hours. Treatment is otherwise symptomatic and supportive.

### **!! IN ALL CASES OF SUSPECTED POISONING, GET MEDICAL ATTENTION IMMEDIATELY !!**

For emergency **MEDICAL** response and hazard communication **ONLY**, call:

**Hazard Information Services at (800) 228-5635 ext. 283.**

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## 5. FIRE FIGHTING MEASURES

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**Flashpoint (test method):** Not applicable

**Flammable Limits (% in air):** Not applicable

**Autoignition Temperature:** Not applicable

### Appropriate Extinguishing Media

Use dry chemical, foam, or CO<sub>2</sub>.

### Fire Fighting Guidance

Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke or vapors generated. If water is used to fight fire, dike area to contain run-off and prevent contamination of water supplies.

### Unusual Fire, Explosion, and Reactivity Hazards

Dusts may present explosion hazard.

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## 6. ACCIDENTAL RELEASE MEASURES

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### In Case of Spills or Leaks

Isolate and post spill area. Wear prescribed protective clothing and equipment. Keep out animals and unprotected persons. Keep material out of streams and sewers. Large spills should be covered to prevent dispersal. Vacuum or shovel wastes into an approved drum. To decontaminate spill area, tools and equipment, wash with a suitable solution (i.e., organic solvent, detergent, bleach or caustic), and add the solution to the drums of wastes already collected. Label drums for contents. Dispose of drummed wastes, including decontamination solution, in an approved waste disposal facility. For minor spills, leaks, etc., follow all precautions indicated on the label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup and disposal of wastes.

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## 7. HANDLING AND STORAGE

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### Precautions in storing

DO NOT contaminate water, food or feed by storage or disposal. Store in a cool, dry, well-ventilated area away from food or feed. Avoid excess heat. Store in original containers only. Keep out of reach of children and animals. Do not contaminate other pesticides and fertilizers by storage or disposal.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Engineering Controls

Thoroughly ventilate all transport vehicles prior to unloading. Use local exhaust at all process locations to control employee exposure.

### Personal Protection

#### Eye/Face

Not required; use normal safety precautions.

#### Skin Protection

Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, and shoes plus socks.

#### Respiratory Protection

Not required; use normal safety precautions.

#### Additional Protection

#### Information

Emergency eyewash fountain should be located nearby. Follow manufacturer instructions for cleaning/maintaining personal protective equipment (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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**Appearance:** Tan to light brown granules

**Odor:** Mild garlic-type odor

**Melting Point:** Not applicable

**Boiling Point:** Not applicable

**Specific Gravity/**

**Density:** 30 lbs./ft<sup>3</sup>

**Solubility in H<sub>2</sub>O**

**Diazinon** Insoluble

**Vapor Pressure**

**Diazinon** Not applicable

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## 10. STABILITY AND REACTIVITY

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**Stability:** Stable

**Hazardous**

**Polymerization:** Will not occur

**Decomposition**

**Products:** CO, CO<sub>2</sub>, aliphatic organophosphates, substituted pyrimidines, HCN. S-TEPP and diazoxon may form when diazinon is reacted with trace amounts of water.

**Hazardous**

**Mixtures:** Strong oxidizers, alkalis (bases)

**Conditions**

**To Avoid:** Excessive heat and fire. Water, acids and bases. Thermal decomposition and burning may produce toxic by-products.

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## 11. TOXICOLOGICAL INFORMATION

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### Acute Toxicity/Irritation Studies

Laboratory testing has shown Dicloran to have no chronic effects.

**Ingestion:** Acute Oral LD<sub>50</sub> (rat): >1,700 mg/kg body weight

**Dermal:** Acute Dermal LD<sub>50</sub> (rabbit): >5,800 mg/kg body weight

**Inhalation:** Acute Inhalation LC<sub>50</sub> (rat): >3.0 mg/L air – 4 hour

**Eye Contact:** Slightly irritating

**Skin Contact:** Slightly irritating

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## 11. TOXICOLOGICAL INFORMATION (continued)

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### Mutagenic Potential

Not available

### Reproductive Hazard Potential

Not available

### Chronic/Subchronic Toxicity Studies

Not available

### Carcinogenic Potential

None

### Other Toxicity Information

Not available

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## 12. ECOLOGICAL INFORMATION

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### Summary of Effects

#### Diazinon

This product is highly toxic to birds, fish, and other wildlife. Birds, especially waterfowl (ducks or geese), feeding or drinking on treated areas may be killed. Because of the migratory habits of certain Atlantic Coast waterfowl, do not apply this product to lawns in Nassau County, New York, between November 1 and May 20. Do not exceed maximum permitted label rates. Application rates above those recommended significantly increase potential hazards to birds. Avoid overlapping of granules. Granules that are spilled or are visible on soil surfaces should be covered with soil or thoroughly mixed into the soil. For lawns, follow all watering instructions in the direction for use; however, stop watering before puddling occurs. For lawns, do not apply this product to sites occupied by waterfowl, or within 75 ft. of any body of water, which may attract waterfowl, such as ponds or lakes. 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. Runoff may be hazardous to fish and other aquatic organisms in neighboring areas. Shrimp and crab may be killed at application rates recommended on the 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 wash waters.

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## 13. DISPOSAL CONSIDERATION

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### Pesticide Disposal

Pesticide or equipment rinsate that cannot be used according to the label instructions may be disposed of on site or at an approved waste disposal facility. For information concerning the proper disposal of pesticide-related wastes, contact your State Environmental Department, State Department of Agriculture, or the Regional Office of the Environmental Protection Agency for your area.

### Container Disposal

Completely empty bag by shaking and tapping sides and bottom to loosen clinging particles into application equipment. Then dispose of empty bag in a sanitary landfill or incinerate, or burn if allowed by State and local authorities. Stay out of smoke during burning. Do not reuse container.

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## 14. TRANSPORT INFORMATION

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### DOT Classification

RQ, Environmentally Hazardous Substance, Solid, N.O.S. (Diazinon), 9, UN 3077, PG III, NAERG # 171  
(Add "Marine Pollutant" if shipped by water)

### International Maritime Organization

RQ, Environmentally Hazardous Substance, Solid, N.O.S. (Diazinon), 9, UN 3077, PG III, Marine Pollutant, NAERG # 171

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**14. TRANSPORT INFORMATION (continued)**

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**International Civil Aviation Organization**

RQ, Environmentally Hazardous Substance, Solid, N.O.S. (Diazinon), 9, UN 3077, PG III, Marine Pollutant, NAERG # 171

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**15. REGULATORY INFORMATION**

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**SARA Title III Classification**

Section 302/304: Not applicable  
Section 311/312: Immediate (acute) health hazard  
Section 313 chemical(s): Diazinon  
Threshold Planning Quantity (TPQ): 20 lbs. product

**Proposition 65**

Not applicable

**CERCLA Reportable Quantity (RQ)**

20 lbs. of product

**RCRA Classification**

Not applicable

**TSCA Status**

Exempt from TSCA

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**16. OTHER INFORMATION**

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**NFPA Hazard Ratings**

<b>Health:</b>	2	0	Least
<b>Flammability:</b>	0	1	Slight
<b>Reactivity:</b>	0	2	Moderate
		3	High
		4	Severe

**Notice:** The information and recommendations contained herein are provided in good faith and are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information herein.

**Prepared By:**

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