



MATERIAL SAFETY DATA SHEET

Product: GOWAN DIAZINON 4E

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

Emergency Phone:
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 4E
EPA Signal Word: Caution
Active Ingredient: Diazinon (48.0%)
Chemical Name: O,O-diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate
Chemical Class: Organophosphorous Pesticide
EPA Registration No.: 10163-100
CAS No.: 333-41-5

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	OSHA – PEL	ACGIH – TLV	OTHER	NTP/IARC/OSHA CARCINOGEN
Diazinon (48.0%)	0.1 mg/m ³	0.1 mg/m ³	Not established	No

3. HAZARDS IDENTIFICATION

Physical Properties

Appearance: Brownish liquid
Odor: Solvent odor

Symptoms of Over 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. Eye and skin contact can cause irritation. This product contains an aromatic petroleum solvent composed of xylenes, ethylbenzenes and aromatic naphtha containing trimethylbenzenes. Inhalation of solvent vapors at high concentrations can cause central nervous system depression, respiratory tract irritation, asphyxiation, cardiac stress, and coma. Effects of chronic exposure to this solvent can include blood disorders (anemia, leukopenia), and kidney or liver damage. This product also contains an emulsifier, which is reported by the manufacturer to be a severe eye irritant.

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.

Primary Routes of Exposure

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

Hazardous Decomposition Products

An impurity of toxicological concern, thionotetraethyl-pyrophosphate (O,S-TEPP) can be formed when diazinon-containing products are exposed to trace amounts of water. This reaction will not occur when diazinon is mixed with large amounts of water.

Unusual Fire, Explosion, and Reactivity Hazards

If water is used to fight fire, dike area to contain run-off and prevent contamination of water supplies. Smoke and fumes from fire may contain hazardous components. Forms flammable mixtures with air at temperatures above 41°C.

4. FIRST AID MEASURES

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 or Poison Control Center immediately. **DO NOT INDUCE VOMITING.** Vomiting may cause aspiration pneumonia. Do not give anything by mouth if person is unconscious or convulsing.

Inhalation: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

Eye Contact: Rinse eyes with plenty of water. Call a physician if irritation persists.

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. This product contains a Xylene-range Aromatic Solvent, which may be present an aspiration hazard. Gastric lavage may be indicated if product was taken internally.

!! 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.

5. FIRE FIGHTING MEASURES

Flashpoint (test method): 105°F, TCC

Flammable Limits (% in air): Not applicable

Autoignition Temperature: Not applicable

Appropriate Extinguishing Media

Use dry chemical, foam, or CO₂.

Fire Fighting Guidance

Wear full protective clothing and self-contained breathing apparatus. Evacuate non-essential 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. 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

Smoke and fumes from fire may contain hazardous components. Forms flammable mixtures with air at temperatures above 41°C.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spills or Leaks

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Cover the spill with an absorbent material such as pet litter, sweep up and place in an approved chemical waste 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 waste container. Seal container and dispose of in an approved manner. Take special care to avoid contamination of equipment and facilities during cleanup and disposal of wastes.

7. HANDLING AND STORAGE

Precautions in storing

DO NOT contaminate water, food or feed by storage or disposal. Do not contaminate other stored products or the storage area by handling or storage of this product. Do not use, pour, spill, or store near heat or open flame. Store in a cool, dry place, away from children. Immediately clean up any spills, which occur during handling and storage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Use in a well ventilated area.

Personal Protection

Eye/Face Not required; use normal safety precautions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Skin Protection	Applicators and other handlers must wear long-sleeved shirt and long pants, chemical-resistant gloves, such as Barrier Laminate, butyl or nitrile rubber \geq 14 mils, or Viton \geq 14 mils, and shoes plus socks.
Respiratory Protection	Not required; use normal safety precautions.
Additional Protection Information	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/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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brownish liquid
Odor:	Solvent odor
Melting Point:	Not applicable
Boiling Point:	190°C
Specific Gravity/ Density:	30 lbs./ft ³
Solubility in H₂O Diazinon	Miscible
Vapor Pressure Diazinon	2.0 mm Hg @ 20°C

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous Polymerization:	Will not occur
Decomposition Products:	An impurity of toxicological concern, thionotetraethyl-pyrophosphate (O,S-TEPP) can be formed when diazinon-containing products are exposed to trace amounts of water. This reaction will not occur when diazinon is mixed with large amounts of water.
Hazardous Mixtures:	Strong oxidizers, acids, bases
Conditions To Avoid:	Flame, heat, ignition sources, strong oxidizers, acids and bases.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies

Ingestion:	Not available
Dermal:	Not available
Inhalation:	Not available
Eye Contact:	Slightly irritating
Skin Contact:	Slightly irritating

Mutagenic Potential
Not available

Reproductive Hazard Potential
Not available

Chronic/Subchronic Toxicity Studies
Not available

11. TOXICOLOGICAL INFORMATION (continued)

Carcinogenic Potential

None

12. ECOLOGICAL INFORMATION

Summary of Effects

Diazinon

This product is highly toxic to birds, fish, and other wildlife. Birds, especially waterfowl, feeding or drinking on treated areas may be killed. Because of the migratory habits of 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. Rates above those recommended significantly increase potential hazards to birds, especially waterfowl. Avoid overlapping of sprays. If waterfowl, i.e., ducks or geese, can be expected in the treated area after treatment (except spot treatment), apply at least ¼ inch of water immediately after spraying this product, however, stop watering before puddling occurs. 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.

13. DISPOSAL CONSIDERATION

Pesticide Disposal

Open dumping is prohibited. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. 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

Triple rinse (or equivalent). Then puncture and dispose of in a sanitary landfill, or incinerate, or burn, if allowed by State and local authorities. Stay out of smoke from burning container.

14. TRANSPORT INFORMATION

DOT Classification

RQ, Organophosphorus Pesticide, Liquid, Toxic, Flammable, (Diazinon), 6.1, UN 3017, PG III, NAERG # 131
(Add "Marine Pollutant" if shipped by water)

International Maritime Organization

RQ, Organophosphorus Pesticide, Liquid, Toxic, Flammable, (Diazinon), 6.1, UN 3017, PG III, Marine Pollutant, EmS 6.1-01, MFAG 505, FP 40° C, NAERG # 131

International Civil Aviation Organization

RQ, Organophosphorus Pesticide, Liquid, Toxic, Flammable, (Diazinon), 6.1, UN 3017, PG III, Marine Pollutant, NAERG # 131

15. REGULATORY INFORMATION

SARA Title III Classification

Section 302/304:	Not applicable
Section 311/312:	Immediate (acute) health hazard Delayed (chronic) health hazard Fire hazard
Section 313 chemical(s):	Diazinon, Xylenes (Mixed O, M, & P Isomers), and Ethyl Benzene

Proposition 65

Not applicable

CERCLA Reportable Quantity (RQ)

0.25 gallon of product (1 lb. of diazinon)

15. REGULATORY INFORMATION (continued)

RCRA Classification

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, 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.

TSCA Status

Exempt from TSCA

16. OTHER INFORMATION

NFPA Hazard Ratings

Health:	2	0	Least
Flammability:	2	1	Slight
Reactivity:	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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