

ACCEPTED

NOV 27 2001

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 100-977

D·z·n[®] diazinon MG 56.0% WBC AG

Water-Based Concentrate

*An Insecticide for Repackaging Use Only
Into Registered End-Use Insecticides for
Specified Agricultural Outdoor Uses Only*

Reduced Odor

Active Ingredient:

Diazinon (CAS No. 333-41-5) 56.0%

Other Ingredients: 44.0%

Total: 100.0%

KEEP OUT OF REACH OF CHILDREN.

CAUTION

*See additional precautionary statements and
directions for use on label.*

EPA Reg. No. 100-977 EPA Est. 70404-AL-001

SCP 977A-L2A 0401

PRODUCT ID.

28787



D·z·n® diazinon MG 56.0% WBC AG

FIRST AID	
This product contains diazinon, an organophosphate insecticide that inhibits cholinesterase.	
If swallowed	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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.
If inhaled	<ul style="list-style-type: none"> • 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 treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • 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.
NOTE TO PHYSICIAN	
This product contains diazinon, an organophosphate that inhibits cholinesterase. If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is also antidotal, but should be administered only in conjunction with atropine.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER	
For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed, inhaled, or absorbed through skin. Causes eye irritation. Avoid contact with eyes, skin, or clothing. Avoid breathing vapor. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Do not contaminate food or feed.

Environmental Hazards

This pesticide is highly toxic to fish and wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters, unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the Environmental Protection Agency.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

D-z-n® diazinon MG 56.0% WBC AG

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitations of Warranty and of Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Formulators using this product are responsible for obtaining EPA registration of their formulated or manufacturing-use products.

Prohibited Uses

This pesticide **MAY NOT BE** repackaged or reformulated into any manufacturing-use or end-use insecticides for any indoor use such as:

In pet collars, or inside any structure or vehicle, vessel, or aircraft or any enclosed area, and/or on any contents therein or on any site or crop not specified on this label.

Permitted Uses

This pesticide **MAY BE REPACKAGED** only into end-use insecticides with

A. Agricultural Product Labels for the following terrestrial food crops:

- Almonds, apples, apricots, beans (seed treatment only) except soybeans, beets (red, table), blackberries, blueberries, boysenberries, broccoli, Chinese broccoli, Brussels sprouts, cabbage, Chinese cabbage (bok choy and napa), cantaloupes, carrots, Casaba melons, cauliflower, cherries, cole crops, collards, field corn (seed treatment only), sweet corn (including seed treatment), cranberries, Crenshaw melons, dewberries, endive (escarole), figs, filberts, ginseng, grapes, honeydew melons, hops, kale, lettuce, lima beans (seed treatment only), loganberries, melons, muskmelons, mustard greens, Chinese mustard, nectarines, onions, peaches, pears, peas (seed treatment only), Persian melons, pineapples, plums, prunes, radishes, Chinese radishes, raspberries, rutabagas, snap beans (seed treatment only), spinach, strawberries, sugar beets, tomatoes, walnuts, and watermelons.

B. Agricultural Product Labels for the Following Non-Food Crop Uses:

- Ornamentals grown outdoors in nurseries

Chemical and Physical Properties

Refer to: "Technical Bulletin - Diazinon Insecticide". Contact your Syngenta Crop Protection Specialty Sales Representative or Syngenta Crop Protection Regulatory Affairs Department in Greensboro, North Carolina for a copy of this document.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment. Open dumping is prohibited. If freezing occurs, place product in a warm room (68°F or above) and roll or shake container frequently until thawing is complete.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal is a violation of Federal law. If pesticide or equipment rinsates cannot be used according to formulation instructions or chemically reprocessed, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

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D-z-n® diazinon MG 56.0% WBC AG

Container Disposal

Thoroughly clean tanker before reusing.

Note: For minor spills, leaks, etc., follow all precautions indicated on this 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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For non-emergency (e.g., current product information), call
Syngenta Crop Protection at 1-800-334-9481.

Syngenta Crop Protection, Inc.
Greensboro, North Carolina 27409
www.syngenta-us.com

SCP 977A-L2A 0401

Technical Bulletin

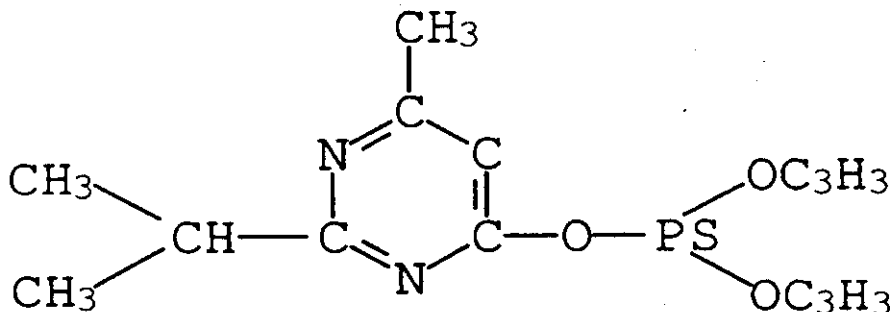
D·Z·N® DIAZINON MG 56.0% WBC (Water-Based Concentrate) EPA Reg. No. 100-977

For Repackaging Use Only

D·z·n Diazinon MG 56.0% WBC is a water-based insecticide concentrate which can be used for repackaging as described in this manual.

Chemical and Physical Properties

Chemically, diazinon insecticide is 0,0-diethyl 0-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate, and has the following structural formula:

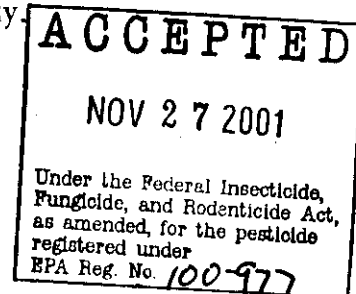


The empirical formula is $C_{12}H_{21}N_2O_3PS$ with a molecular weight of 304.3. Technical Diazinon has a boiling point of 117-120° under 0.50 mm Hg, is light tan to brown in color, and is non-corrosive. Technical Diazinon dissolves readily in aliphatic and aromatic petroleum solvents, alcohols, and ketones, but is soluble in water to only 60 ppm. The vapor pressure of Technical Diazinon is 1.06×10^{-4} mm Hg at 25°C.

Freezing point of D·z·n® Diazinon MG 56.0% WBC: 0°C.

D·z·n® Diazinon MG 56.0% WBC becomes solid at this temperature. As temperature is raised, the D·z·n® Diazinon MG 56.0% WBC reconstitutes completely.

Viscosity: 650 cps at 20°C (typical).



Specifications for D·z·n®
Diazinon MG 56.0% WBC

- | | |
|---|--------|
| (1) Diazinon content, % by weight,
NOMINAL | 56.0 |
| (2) Flash point (PMCC) | >220°F |

Nominal Values

- | | |
|--------------------------------------|------|
| (1) Weight per gallon pounds at 68°F | 8.93 |
| (2) Density g/ml | 1.07 |

Stability

Accelerated storage tests at higher temperatures have proven the stability of D·z·n® Diazinon MG 56.0% WBC. Stability problems should not occur if the recommendations are followed.

Equipment used to process and package this formulation should be cool, clean and dry.

Handling and Storage

Keep containers tightly closed. Store in a cool, dry place, away from heat and open flame. Do not hold partially full containers for extended periods of time.

Bulk Storage

D·z·n® Diazinon MG 56.0% WBC must be protected from contact with acids during storage.

D·z·n® Diazinon MG 56.0% WBC should be stored in stainless steel tanks which are fitted with a conversation vent to prevent free exchange between the tank and the atmosphere.

Tank fittings containing copper, brass or rubber should not be used.

Safety Precautions

After working with D·z·n® Diazinon MG 56.0% WBC, thoroughly clean contaminated equipment. Wash thoroughly, change clothing and clean protective gear. Launder contaminated clothing separately from non-contaminated clothing. Discard heavily contaminated articles which cannot be washed, such as leather shoes.

Some safety precautions to be followed in production plants where diazinon insecticides are being manufactured are as follows (refer to MSDS for more details):

- 1) In mixing areas, it is suggested that respirators be worn. (See list of acceptable respirators).
- 2) Street clothing should not be worn in mixing areas during the handling of material. Clothing contaminated with any chemical should be laundered before reuse, or discard if articles cannot be washed. Those directly exposed to a mixing process should wear rubber gloves, waterproof boots, chemical safety glasses and protective clothing.
- 3) A shower should be taken at the end of each day or immediately in the case of accidental exposure.
- 4) Food or smoking should not be permitted in a mixing area.
- 5) Workers should wash thoroughly before eating, drinking, or using tobacco products.
- 6) Maintenance workers should observe the same precautions and wear the same type of clothing as those directly concerned with mixing.

Respirators

The following respirators are among those which have been approved for use in pesticide manufacturing plants. Respirators should be maintained according to the manufacturer's directions.

- 1) American Optical Respirator assembly R-5000 with filter R-58 (American Optical Company, Safety Division, Southbridge, Massachusetts).
- 2) MSA half-mask respirator No. 448848 with cartridge filter No. 448847.
- 3) MSA full-face respirator No. 460560 with cartridge filter No. 448847. (Mine Safety Appliances Company, Pittsburgh, Pennsylvania).
- 4) Wilson pesticide respirator 1200 with filter R-11. Products Division, Ray-O-Vac Company, Reading, Pennsylvania.

Toxicology

- 1) Slightly Toxic Acute Oral LD₅₀ (rat): 1,600 mg/kg.
- 2) Slightly Toxic Dermal LD₅₀ (rabbit): >2,020 mg/kg.
- 3) Slightly Toxic Inhalation LC₅₀ (rat): (four-hour exposure) >2.5 mg/l
- 4) Eye Irritation (rabbit): Minimally irritating.
- 5) Primary Skin Irritation: Non-irritating.
- 6) Skin Sensitization: Not a sensitizer (G. Pig)

Toxic Symptoms Which May Be Observed After Accidental Ingestion

D·z·n® Diazinon MG 56.0% WBC is an organophosphate (Cholinesterase inhibiting) insecticide. These compounds are relatively poisonous to animals and humans. Symptoms of cholinesterase inhibition can include the following: headache, dizziness, blurred vision, nervousness, weakness, stomach and/or muscle cramps, diarrhea, discomfort in the chest, sweating, miosis (pinpoint pupils), tearing, salivation and other excessive respiratory tract secretion, vomiting, cyanosis, papilledema, uncontrollable muscle twitches, convulsions, coma, loss of reflexes and loss of sphincter control. (Refer to MSDS for more details).

Antidote

Atropine is antidotal providing it is used as soon as early poisoning symptoms appear and the dose of diazinon is not too great. It is important to give large doses of atropine, up to ten times the usual dosage.

- I. In very severe cases, the order of treatment for adults should be as follows:
 - a. Artificial respiration, if required, preferably by mechanical means.
 - b. Atropine sulfate, 2 to 4 mg (1/30 to 1/15 grain) intravenously as soon as cyanosis is overcome. Repeat at 5- to 10-minute intervals until signs of atropinization appear (dry, flushed skin and tachycardia as high as 140 per minute).
 - c. 2-PAM slowly (pyridine-2-aldoxime methochloride), intravenously; if the patient fails to respond satisfactorily to atropine sulfate, dose of 1 g for adults, 0.25 g for infants. 2-PAM is of little value 24 hours after the time of poisoning.

- d. Lavage stomach if ingested and vomiting has not occurred. After lavage, instill and leave 30 g of activated charcoal in 3-4 ounces of water in stomach.
- e. Wash contaminated skin with soap and water.
- f. In case of contact with eyes, flush with plenty of water for at least 15 minutes and get medical attention.
- g. Symptomatic treatment.

II. In moderate or mild cases, proceed as follows:

- a. Atropine sulfate, 1 to 2 mg (1/60 to 1/30 grain) if symptoms appear. If excessive secretion occurs, keep the patient fully atropinized. Give atropine sulfate every hour up to 25 to 50 mg in a day.
- b. Lavage stomach.
- c. Wash contaminated skin with soap and water.
- d. In case of contact with eyes, flush with plenty of water for at least 15 minutes and get medical attention.
- e. Symptomatic treatment.

Note: Morphine, theophylline, aminophylline and large amounts of intravenous fluids are contraindicated. Atropine should not be given to a cyanotic patient until oxygenation has been restored by artificial respiration. Tranquilizers are seldom indicated and there is evidence that phenothiazine drugs increase mortality in experimental animals poisoned by organic phosphates.

FOR ADDITIONAL INFORMATION, contact the nearest Poison Control Center, or write to Environmental Safety and Compliance, Syngenta Crop Protection, Inc., P.O. Box 18300, Greensboro, NC 27419, or call 1-336-632-6000.

In case of emergencies, phone (day or night) 1-800-888-8372

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Blood Cholinesterase

Since diazinon acts by inhibiting the enzyme cholinesterase, it is suggested that periodic checks be made of the blood cholinesterase levels in handlers.

Syngenta Crop Protection, Inc.
P.O. Box 18300
Greensboro, NC 27419

The information contained herein is based on data which are believed to be reliable, but it is understood that all such information is not guaranteed by Syngenta Crop Protection to be accurate and is to be used at the risk of the user of such information. **UNDER NO CIRCUMSTANCES SHALL SYNGENTA BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE HANDLING OF THIS PRODUCT.** Nothing herein is intended to imply the non-existence of any relevant patents, nor to constitute an inducement to practice any invention claimed in any patent not owned or controlled by Syngenta Crop Protection without authority from the owner of said patent now or hereafter in existence.