



SAFETY DATA SHEET DIAZOL 800 EC INSECTICIDE

Section 1: Identification of the Substance and Supplier

Product name : DIAZOL® 800 EC INSECTICIDE
Chemical name of active Ingredient(s): DIAZINON is an organophosphorus derivative.
Recommended Use: For control of insect pests in pasture and kiwifruit and other horticultural crops.
Supplier: ADAMA New Zealand Limited
Level1/19 Elms Street, Wakatu Estate, Stoke, Nelson, New Zealand
P.O. Box 1799, Nelson New Zealand.
Telephone +64 3 5438275 Fax: +64 3 5438274
Emergency Telephone: 0800 POISON (0800 764 766)

Section 2: Hazards identification

Hazard Classifications: 3.1D, 6.1C, 6.3B, 6.8B, 6.9A, 9.1A, 9.2D, 9.3A, 9.4A

WARNING –

Combustible liquid. Do not store or use near heat or naked flame.
Will burn if ignited.

TOXICITY

DANGER–

May be fatal if swallowed, inhaled or absorbed through the skin.

May cause mild skin irritation.

May cause reproductive/development damage from repeated oral exposure at high doses.

Presumed to cause neurotoxicity (nervous system) damage from repeated oral exposure at high doses.

Avoid skin and eye contact and inhalation of spray mist.

The toxicity of this diazinon product may increase markedly over time.

DO NOT use this product if it is out-of-date.

ECOTOXICITY

Very toxic to aquatic organisms. Avoid contamination of any water supply with product or empty container. Harmful to the soil environment. Very toxic to terrestrial vertebrates and invertebrates.

Toxic to bees. Spray must NOT contact plants in flower if they are likely to be visited by bees.

Section 3. Composition/information on Ingredients

Information on hazardous ingredients *

Common name	CAS No.	Value	TWA (mg/m ³)	STEL (mg/m ³)
Diazinon	333-41-5	80%	0.1	not Set
Other non hazardous ingredients	secret	to 100%	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities or other on hazardous ingredients are also possible.

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (short term exposure limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

- **Occupational Exposure Limit(s), if available, are listed in section 8**



SAFETY DATA SHEET DIAZOL 800 EC INSECTICIDE

Section 4: First-Aid Measures

General First-aid information:	You should call The National Poisons Centre on 0800 POISON (0800 764 766) or a doctor immediately if you feel that you may have been poisoned, burned or irritated by this product. Have this MSDS with you when you call.
Inhalation:	Remove victim to fresh air. Keep victim warm and at rest. If breathing is difficult, give oxygen. Obtain medical attention at once.
Ingestion:	If swallowed DO NOT induce vomiting, rinse mouth thoroughly with water and contact National Poisons Centre or a doctor at once. Give activated charcoal if instructed.
Skin contact:	Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts) and completely decontaminate them before reuse or discard.
Eye contact:	Wash out immediately with water. First aid is not generally required. In doubt, contact National Poisons Centre or a doctor.
Note to physician:	If ingested administer activated charcoal.

Section 5: Fire-Fighting Measures

Type of Hazard:	This product is classified as a C1 combustible product. There is a slight risk of an explosion from this product if commercial quantities are involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distance. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.
Extinguishing media Suitable:	Small Fire: Dry chemical, carbon dioxide, foam and water fog. Large Fire: Water fog, or fine spray
Hazchem Code:	2X
Protection of fire-fighters:	Do not enter fire area without proper protective equipment, including splash suit with self contained breathing apparatus.

Section 6: Accidental Release Measures

Personal precautions:	Wear full protective clothing. This means wearing chemically resistant clothing including eye/face protection, gauntlets and self contained breathing apparatus. (See section 8)
Environmental precautions:	Washings must be prevented from entering surface water drains or waterways. Dispose of the waste safely in an approved landfill.
Methods for cleaning up:	In the event of a major spill, prevent spillage from entering drains and water course. Immediately call the Fire Brigade. Extinguish all ignition sources. Exclude all bystanders from the vicinity of the spill. Stop leak if safe to do so and contain spill and prevent material from entering waterways. Absorb onto sand, vermiculite or other suitable absorbent material and place in waste containers. Wash area with water and alkaline detergent then absorb any remaining liquid with further inert material. Dispose of the waste safely in an approved landfill.

Section 7: Handling and Storage

Handling:	Keep out of reach of children. Do not eat, drink or smoke while using.
Storage:	Store in tightly closed original containers under cool, dry, dark conditions and away from sources of ignition, stockfeed, seeds or foodstuffs and under lock and key. DO NOT allow water to enter this container. DO NOT rinse the lid with water. As a Class 9 Substance with Ecotoxicity Classifications storage of Diazol 800 Insecticide must be carried out in such a manner as to prevent contamination of waterways. It is



SAFETY DATA SHEET DIAZOL 800 EC INSECTICIDE

recommended that The New Zealand Standard for the Management of Agrichemicals (NZS8409) is followed as a means of meeting the secondary containment provisions of the HSNO Emergency Management Regulations.

Packing: Fluorinated or co-extruded polyethylene containers.
Resin-lined metal drums.

Section 8: Exposure Controls/Personal Protection

Industrial Hygiene: No special ventilation is usually needed when occasionally handling small quantities. However make sure the work environment remains clean and that vapours and mists are minimised.

Occupational Exposure Limits: Diazinon
TWA [mg/m^3]: 0.1
STEL [mg/m^3]: Not set

Personal protective equipment:

Respiratory system: Usually no respirator is necessary when using this product.

Skin and body: When mixing and applying wear appropriate protective clothing including cotton overalls buttoned to the neck and wrist and chemical resistant boots
Wear impervious elbow-length gloves.

Hands: Chemical goggles or safety glasses.

Eyes: Wash hands, arms and face with soap and water before meals and after work. Wash protective clothing after use.

Section 9: Physical and Chemical Properties

Physical state: Liquid
Colour: Yellow to brown
Odour: Strong unpleasant odour
pH value: No data
Specific gravity: Approx 1.1 at 20°C
Freezing/Melting point [°C]: No specific data. Liquid at normal temperatures
Vapour Pressure: No data
Water Solubility: Emulsifiable
Volatility: No data
Odour Threshold: No data
Evaporation rate: No data
Coeff Oil/water distribution: No data

Section 10: Stability and Reactivity

Reactivity: Unlikely to react or decompose under normal storage conditions.
Conditions to avoid: Keep isolated from combustible materials, direct sun light.
This product should be kept in a cool place, preferably below 30°C. Containers should be kept dry. Store in the closed original container in a dry, cool well-ventilated area out of direct sun light.

Incompatibilities: Strong oxidising agents.
Fire Decomposition: Carbon dioxide, carbon monoxide, nitrogen, oxides of nitrogen.
Occasionally hydrogen cyanide gas. Oxides of phosphorus and other phosphorus compounds.

Polymerisation: This product will not undergo polymerisation reaction.



SAFETY DATA SHEET DIAZOL 800 EC INSECTICIDE

Section 11: Toxicological Information

Rat oral LD50 [mg/kg]:	300-400 (technical grade Diazinon)
Rat dermal LD50 [mg/kg]:	3600
Rabbit inhalation LC50 [mg/L/4h]:	3.5
Chronic Toxicity [mg/kg/day]:	10mg for swine 1000 for rats
Acute Toxicity:	Toxic effects of Diazinon are due to the inhibition of acetyl cholinesterase, an enzyme needed for proper nervous system function. The range of effects varies widely with formulation and with the individual species being exposed. This transformation may occur in air particularly in the presence of moisture, and by ultraviolet radiation. Most modern Diazinon formulations are stable and do not degrade easily. Symptoms associated with Diazinon poisoning in humans include weakness, headaches, tightness in the chest, blurred vision. Non-reactive pinpoint pupils, salivation, sweating, nausea, vomiting, diarrhoea, abdominal cramps, and slurred speech.
Reproductive effects:	No data currently available
Teratogenic effects:	The data on teratogenic effects due to chronic exposure are inconclusive. One study has shown that injection of Diazinon into chicken eggs resulted in skeletal and spinal deformities in the chicks. Bobwhite quail born from eggs treated in a similar manner showed skeletal deformities but no spinal abnormalities. Tests with dogs and pigs at higher levels (1.0-10.0 mg/kg/day) revealed gross abnormalities.
Mutagenic effects:	Current evidence is inconclusive

Section 12: Ecological Information

Common name:	Diazinon
	Very toxic to aquatic organisms may cause long-term adverse effects to the aquatic environment.
Effects on birds:	Birds are significantly more susceptible to Diazinon than other wildlife. LD ₅₀ for birds range from 2.75 mg/kg to 40.8 mg/kg
Effects on aquatic Organisms:	Highly toxic to fish. Some evidence shows that saltwater fish are more susceptible than freshwater fish. LC ₅₀ in rainbow trout is 2.6 – 3.2 mg/L LC ₅₀ in fathead minnow and goldfish >15 mg/L
Effects on other Organisms:	Highly toxic to bees
Breakdown in soil and groundwater:	Low persistence in soil. Half life is 2 to 4 weeks. Bacterial enzymes can speed the breakdown of diazinon and have been used in treating emergency situations such as spills. Diazinon seldom migrates below the top half inch in soil, but in some instances it may contaminate groundwater.
Breakdown in water:	Breakdown rate is dependent on the acidity of water. At highly acidic levels, one half of the compound disappeared within 12 hours while in a neutral solution, it took 6 months to degrade to one half of the original concentration.
Breakdown in vegetation:	In plants a low temperature and high oil content tend to increase the persistence of Diazinon. Generally half life is rapid in leafy vegetables, forage crops and grass. The range is from 2 to 14 days. In rice plants only 10% of the residue was present after 9 days. Diazinon is absorbed by plant roots when applied to the soil and translocated to other parts of the plant.

Section 13: Disposal Considerations

Methods of disposal:	Dispose of product only by using according to the label, or at an approved landfill. Do not burn. Triple rinse empty container and add rinsate to spray tank. Crush and bury in suitable landfill.
-----------------------------	--



SAFETY DATA SHEET DIAZOL 800 EC INSECTICIDE

Section 14: Transport Information

UN Number	3082
Proper shipping name	Environmentally hazardous substance, Liquid, N.O.S.
DG Class	9
Packing Group	III
Hazchem Code	2X
Marine Pollutant	Yes
IER Guide page	47

National transport regulations: Do not carry this product on a passenger service vehicle.

Segregation: Check the land transport Rule Dangerous Goods 1999, Rule 45001 for additional information. Sea transport may require additional segregation. Refer: NZS5433; Sea Segregation, or the International Maritime Dangerous Goods Code for details.

Section 15: Regulatory Information

New Zealand Regulatory Information:

NZFSA Approval: Registered pursuant to the ACVM Act 1997. No P7724
See www.nzfsa.govt.nz/acvm for registration conditions.

Approved pursuant to the HSNO Act 1996, Approval No. HSR002481
See www.ermanz.govt.nz for registration conditions.

HSNO Classifications: 3.1D, 6.1C, 6.3B, 6.8B, 6.9A, 9.1A, 9.2D, 9.3A, 9.4A



ACUTE TOXIC



ECOTOXIC

APPROVED HANDLER: This product must be under the control of an approved handler during use
TRACKING: This product must be tracked – see SDS for details
RECORD KEEPING: Records of use must be kept under certain circumstances – see The New Zealand Standards for Management of Agrichemicals (NZS8409) for details.

Section 16: Other Information

Note: This product is a registered agricultural chemical and must be therefore be used in accordance with the container label directions. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the Government health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

The information contained in the Safety Data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein.

® registered Trade Mark of an Adama Group Company

HISTORY

Date of printing: 03/06/2014
Supersedes SDS issued 30/06/2009