SAFETY DATA SHEET
DIAZOL 500 EW

Section 1: Identification of the Substance and Supplier

Product name : **DIAZOL 500 EW**
Chemical name of active Ingredient(s): Diazinon: C12H21N2O3PS
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:

TOXICITY
Warning –
May be harmful if swallowed, inhaled or absorbed through the skin.
May cause reproductive/development damage from repeated oral exposure
Danger -
Presumed to cause organ damage from repeated oral exposure at high doses.

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 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

Substance/preparation Preparation
Information on hazardous ingredients *

Common name	CAS No.	Value	EC Number	Symbol	R-Phrases
Diazinon (ISO)	000333-41-5	500 g/l	206-373-8	XN,N	R22, R50-53

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

Section 4: First-Aid Measures

Undesirable human Health effects: Exposure may result in excessive sweating, weakness, salivation, nausea, bradycardia, tachycardia, bronchorrhea, small pupils, central nervous depression, fasciculation and convulsions.

Effects and symptoms:
Inhalation: May result in systemic poisoning
Ingestion: May result in systemic poisoning
Skin contact: May result in systemic poisoning.

First-aid measures: Remove victim from area of exposure. Wash off remaining material with plenty of water.
Inhalation: Remove victim to fresh air. Keep victim warm and at rest. If breathing is difficult: give oxygen. If not breathing, give artificial respiration. Get medical attention.
Ingestion: **Do not induce vomiting.** Wash out mouth with plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.
Skin contact: Remove contaminated clothing. Wash away remainder with water and Soap. Followed by a warm water rinse. Obtain medical attention.
Eye contact: Wash out with plenty of water with the eyelid held wide open for at least 15 minutes. Consult eye specialist immediately.
Notes to a physician: Antidote 1: Atropine sulfate

Antidote 2: Obidoxime chloride or Pralidoxime (PAM)
Suggest serum and/or RBC cholinesterase determination.
If ingested perform gastric lavage and administer activated charcoal.

Protection of first-aiders: Use appropriate protection (see section 8).

Section 5: Fire-Fighting Measures

Extinguishing media
Suitable: For small fire: Dry chemical, carbon dioxide.
For Large fire water spray, alcohol resistant foam

Hazardous thermal (de)composition products: When heated to decomposition, emits toxic fumes: carbon dioxide, carbon monoxide, sulfur oxide, nitrogen oxides, phosphorus oxides,

Protection of fire-fighters: Wear proper protective equipment**.** Use Self-contained breathing apparatus when in close proximity to fire.

Section 6: Accidental Release Measures

Personal precautions: Wear appropriate protective clothing. (see section 8)

Environmental precautions: Dispose of this material and its container at hazardous or special waste collection point. In accordance with national and regional regulations. If the product has contaminated surface water, inform the appropriate authorities. Contaminated soil layers have to be dug out.

Methods for cleaning up: Minor spillage: Absorb in sand or other inert material. Use appropriate container to avoid environmental contamination.
Major spillage: Collect and contain as much free liquid as possible. Dike spills using absorbent or impervious materials such as sand or clay for later disposal.

Section 7: Handling and Storage

Handling: Do not breathe fumes. Avoid contact with skin and eyes.

Storage: Store in the original, unopened container in a cool, dry place, out of direct sunlight and away from stockfeed or foodstuffs.
As a Class 9 Substance with Ecotoxicity Classifications, storage of Diazol Insecticide must be carried out in such a manner as to prevent contamination of waterways. Stores containing more than 100L of Diazol Insecticide require bunding and are subject to signage. Storage must generally be in accordance with The New Zealand Standard for the Management of Agrichemicals (NZS8409).

Packaging materials suitable: Resin lined metal drums. Aluminum or co extruded polyethylene containers.
Co extruded polyethylene bottles.

Section 8: Exposure Controls/Personal Protection

Engineering measures: Ventilation required.

Hygiene measures: Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower. When handling do not eat, drink or smoke. Wash hands thoroughly after handling. Wash clothing separately before re-use.

Occupational Exposure Limits:
TVL-TWA [mg/m^3] Not Established

Personal protective equipment:
Respiratory system: During spraying wear suitable respiratory equipment.
Skin and body: Wear suitable protective clothing.
Hands: Chemical resistant gloves.
Eyes: Safety goggles or Chemical goggles.

SAFETY DATA SHEET
DIAZOL 500 EW

Section 9: Physical and Chemical Properties

Physical state:	Liquid
Colour:	Whitish liquid
Odour:	characteristic
pH value:	6.2-7.5
Specific gravity:	1.063-1.070
Molecular weight:	Diazinon: 304.35
Initial billing point [^{o}C]:	Diazinon: 83-84 (at a pressure of 0.0002 mm Hg –Pure)
Vapour pressure mm/Hg:	Diazinon: 6.6 x (10)-5 (pure)
Solubility in water:	Emulsifiable
Flash Point:	Not flammable

Section 10: Stability and Reactivity

Physico-chemical Stability:	Stable under normal conditions
Conditions to avoid:	Protect from (sun) light and excessive heat. Temperature exceeding: 75^{o}C
Hazardous reactions :	Reacts with: strong oxidizing agents, strong acids, strong bases.
Hazardous Polymerization:	Will not occur
Hazardous decomposition Products:	Thermal decomposition generates: carbon monoxide, carbon dioxide, sulfur oxide, nitrogen oxides, and phosphorus oxides.

Section 11. Toxicological Information

Preparation	**Diazinon (ISO)**
Acute toxicity - Oral:	LD_{50} (rat)= 1834 mg/kg
Acute toxicity - Dermal:	LD_{50} (rat) >4,000 mg/kg
Acute toxicity – Inhalation:	LC_{50} (rat) [mg/l/4h] Diazinon Technical: 5
Skin irritation:	Mildly Irritating to skin (rabbit).
Eye irritation:	Minimal irritant to eyes (rabbit).
Sensitization :	Guinea-pig maximization test: Strong Sensitizer
Common name:	**Diazinon**
Carcinogenicity:	Not carcinogenic
Mutagenicity:	Not mutagenic
Reproduction toxicity:	Not teratogenic in animal experiments

Section 12: Ecological Information

Common name:	**Diazinon**
Ecological effects information	
96 H-LC_{50} – Rainbow trout [mg/ml]	3.1
48 H-LC_{50} – Daphnia magna [µg/l]	.02
LD_{50} Birds [mg/kg]	3.5
Persistence and degradability:	Half life time (t½) = 2 – 4 weeks
Mobility:	Low mobility
Bioaccumulative potential:	Diazinon does not bioaccumulate in aquatic organisms,
72 H-EC_{50} – Algae [mg/l]	6.4

Section 13: Disposal Considerations

Methods of disposal:	Triple rinse empty container and add rinsate to spray tank. Empty containers and product should NOT be burnt. Crush or puncture containers and bury in an suitable landfill, away from watercourses or if appropriate, recycle. Do not contaminate ponds, waterways and ditches with product or used container.

SAFETY DATA SHEET
DIAZOL 500 EW

Section 14: Transport Information

UN Number	3082
Proper shipping name	Environmentally hazardous substance, Liquid, N.O.S, Diazinon
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 P7254
See www.nzfsa.govt.nz/acvm for registration conditions.

Approved pursuant to the HSNO Act 1996, Approval No. HSR000180
See www.ermanz.govt.nz for registration conditions.

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

ECOTOXIC

APPROVED HANDLER - THIS PRODUCT MUST BE UNDER THE CARE OF AN APPROVED HANDLER WHEN IT IS APPLIED IN A WIDE DISPERSIVE MANNER OR USED BY A COMMERCIAL CONTRACTOR

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.

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