



GESAPON SAFETY DATA SHEET

1: Identification of the Substance and Supplier

Product Name:	GESAPON
Recommended Use:	Insecticide
Company Details:	Orion Crop Protection Ltd 14 – 22 Triton Drive, North Harbour, Auckland PO Box 100 570, North Shore Mail Centre, 0745 New Zealand
Telephone Number:	(09) 415 1679 (office hours)
Emergency Telephone:	0800 CHEMCALL (0800 243 622) (24 hours)
National Poison Centre:	0800 POISON (0800 764 766) (24 hours)
Date of Issue/Revision:	June 2009

2: Hazards Identification

Priority Identifiers:	Harmful, Ecotoxic, Keep Out of Reach of Children
HSNO Classes:	Secondary Identifiers:
6.1D	May be harmful if swallowed, inhaled or absorbed through the skin
6.8B	May cause reproductive/developmental damage from repeated oral exposure
6.9A	May cause neurological symptoms and nephrotoxic effects from repeated oral exposure at high doses
9.1A	Very toxic to aquatic organisms
9.2D	Harmful to soil organisms
9.3A	Very toxic to terrestrial vertebrates
9.4A	Very toxic to terrestrial invertebrates

3: Composition/ Information on Ingredients

Ingredient	CAS No	Content (% w/w)
Diazinon (active ingredient)	333-41-5	20
1,2-ethanediol	107-21-1	<10
Other ingredients	Proprietary	Remainder

4: First Aid Measures

Skin Contact:	In case of contact, immediately wash affected area with soap and water. Seek medical advice if irritation persists. Wash contaminated clothing before reuse.
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Eye Contact:	Hold eyes open and rinse with water for at least 15 minutes. Remove contact lenses if easy to do so. Seek medical advice if irritation persists.
Ingestion:	Do not induce vomiting. Keep strictly at rest as continued movement enhances toxic effects. Seek medical advice immediately.
Inhalation:	Immediately move to fresh air and rest. Maintain half upright position if breathing is difficult. Seek medical advice immediately.
Workplace Facilities:	Hand wash facility. Eye wash facility.
Advice to Doctor:	Gesapon is an organophosphorus insecticide, which inhibits cholinesterase activity, and interferes in nerve pulse transmission. On set of symptoms may be delayed for several hours. Atropine is the specific antidote and may be given immediately by qualified staff, at a level of 2 - 5mg (intravenously or intramuscularly), every 20 minutes until atropinisation occurs. Considerable amounts of atropine may be necessary. Atropine must NOT be given to cyanosed patients; administer oxygen first. Do NOT use opiates or barbiturates. If convulsions occur, administer diazepam (10mg intravenously). Take venous blood sample for determination of blood cholinesterase activity. Cholinesterase reactivators (Pralidoxime) should, if possible, be given at the same time as atropine. They are not effective after 24 hours post exposure and are not substitutes for atropine. Pralidoxime should be administered at: Mild poisoning: 1g in 2 - 3ml water (intramuscularly), Severe poisoning: 2g in 30ml water (intravenously). Following ingestion, adsorbents such as charcoal may be of value.
National Poison Centre:	0800 POISON (0800 764 766) (24 hours)

5: Fire-Fighting Measures

Fire/Explosion Hazard:	May be combustible in a fire. As with many dusts, an explosive air/dust mixture may be formed if rough handling liberates dust in enclosed or poorly ventilated areas.
HAZCHEM Code:	22
ERP Guide No:	47
Extinguishing Media:	Water spray, foam, dry chemical or CO2.
Fire Fighting Instructions:	During a fire, toxic fumes may be emitted. Wear self-contained breathing apparatus. Contain runoff.

6: Accidental Release Measures

Exclude non-essential people from the area. Wear protective clothing as described in section 8. Do not inhale dust. Moisten to prevent dusting and carefully sweep up. If dust is generated, wear respiratory protection. Place in a waste container. Dispose of safely to a suitable landfill

7: Storage, Handling and Use

Storage:	Keep out of reach of children. Store in the original packaging in a secure area away from foodstuffs.
Handling and Use:	Keep out of reach of children. Avoid contact with eyes and skin. Avoid inhalation of dust. When mixing or applying, wear protective clothing as described in section 8. Do not eat, drink or smoke while using. Wash hands and face after use. Wash protective clothing after use.
Approved Handler	Required if applied in a wide dispersive manner, or by a commercial contractor.

Tracking Record Keeping	Not required. Record of use must be kept if more than 1 Kg is applied within 24 hours in a place where members of the public may be lawfully present, or where it is likely to enter air or water and leave that place.
Site Requirements under the HSNO Act 1996 and HSNO Regulations:	<ul style="list-style-type: none"> • A location test certificate is not required • A hazardous atmosphere zone is not required • Fire extinguishers are not required • Signage is required for 100 Kg or more • Emergency information is required for 0.5 Kg or more • An emergency plan is required for more than 100 Kg • Secondary containment is not required • Separation/Segregation from incompatible substances is not applicable.
Additional Requirements	All aspects of storage, handling, use, disposal and record keeping must be in accordance with NZS 8409:2004 'Management of Agrichemicals', and relevant local and regional council plans.

8: Exposure Control / Personal Protection	
Tolerable Exposure Limit:	None established.
Workplace Exposure Standards:	Product – None established (Use lowest practicable level). Active ingredient – Diazinon 0.1 mg/m ³ (8hr TWA) Excipients – 1,2-ethanediol – 50 ppm / 127 mg/m ³ (ceiling) Others - None established (Use lowest practicable level)
Engineering Controls:	Limited given nature of use.
Personal Protection:	
Eye:	Safety glasses/goggles (or full face respirator incorporating visor) when handling, mixing or applying.
Skin:	Cotton overalls snugly fitting at the neck, wrist and ankle, boots and gloves (PVC, nitrile, neoprene) when handling, mixing or applying.
Respiratory:	Not required where dust is not inhaled. Otherwise, respirator (organic vapour and particulate matter) is required.
Biological Monitoring:	Regular users should undergo biological monitoring of cholinesterase activity. Consult with your GP or Occupational Health Adviser.

9: Physical and Chemical Properties	
Appearance:	Green Granules
Odour:	Non specific
Melting Point:	Not available
Flash Point:	Not applicable
Auto ignition Temperature:	Not applicable
Explosive Limits:	Not available. As with many dusts, an explosive air/dust mixture may be formed if rough handling liberates dust in enclosed or poorly ventilated areas.
Density:	Not available
Vapour Pressure:	1.2 x 10 ¹ mPa (25°C) (diazinon)
Vapour Density:	Not volatile
Solubility in Water:	Limited solubility
pH:	Not applicable
Oxidising Properties:	Not an oxidizer
Corrosive Properties:	Not a corrosive

10: Stability and Reactivity

Stability:	Stable under normal conditions.
Incompatibility:	Avoid mixing with strong acids, alkalis, and flammable materials.
Decomposition:	Decomposition will not occur under normal conditions. Do not mix with acidic fertilizers.
Dangerous Reactions:	Products arising from combustion or thermal decomposition will be toxic.

11: Toxicological Information

This section describes effects which could occur if this material is not handled in accordance with this data sheet.

Swallowed:	Excessive sweating, salivation, headache, weakness, faintness, nausea, diarrhoea, small pupils, blurred vision, muscle twitching.
Eye:	Irritation. May cause constriction of the pupil.
Skin:	Mild irritation. Can be absorbed via the skin (see symptoms under 'swallowed' above).
Inhalation:	Irritation. Can be absorbed via the lungs (see symptoms under 'swallowed' above).
Note: Symptoms may be delayed for up to 24 hours or more following exposure	
Acute Toxicity:	Acute Oral LD50 (Rat) 1250 mg/kg
(Active Ingredient)	Acute Dermal LD50 (Rat) > 2150 mg/kg
	Inhalation LC50 (4 hr) (Rat) > 2.3 mg/l
Sensitisation Effects:	None
Mutagenic Effects:	None
Carcinogenic Effects:	None
Reproductive Effects:	None
Teratogenic (Birth) Effects:	Animal experiments involving chronic exposure are inconclusive. Injection of diazinon into eggs has shown deformities in chicks. Tests on animals at low feeding doses showed no development effects. However, tests at higher feeding doses showed gross abnormalities.
Systemic Effects:	Interferes with cholinesterase, an enzyme essential for the correct functioning of the nervous system. Ingestion at high doses is damaging to the kidney.

12: Ecotoxicity Information

This section describes effects which could occur if this material is not handled in accordance with this data sheet.

The following information is presented in respect of the active ingredient:

Ecotoxic Effects:	Acute Oral LD50 (Mallard duck) 2.7 mg/kg LC50 (96 hr) (Rainbow trout) 2.6 – 3.2 mg/l LC50 (48 hr) (Daphnia) 0.96 µg/l Algae EC50 >1 mg/l Highly toxic to bees.
Environmental Fate:	Biodegradable. DT50 (soil) 11 – 21 days.
Partition Co-Efficient (Kow):	LogP = 3.30 (high)
Environmental Exposure Limit:	None established.

13: Disposal Considerations

Product: Dispose of product by using it in accordance with the label. Do not burn. Waste product should be disposed of to a suitable landfill. For disposal of large quantities contact Orion Crop Protection Ltd.

Container: Dispose of to a suitable landfill. Do not burn. Do not use for any other purpose.

14: Transport Information

Dangerous Goods:
UN Number: 3077
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DIAZINON 20%)
Class: 9
Subsidiary Class: None
Packing Group: III
Additional Information: ORGANOPHOSPHORUS INSECTICIDE. MARINE POLLUTANT.
MTQ (Non-Commercial) 250 Kg
Passenger Service Vehicle: Maximum quantity 10 Kg

15: Regulatory Information

HSNO Approval No: HSR000175
ACVM Registration No: P2130

16: Other Information

Glossary

Approved Handler	For some hazardous substances, persons storing, handling and using must be trained and certified
DT50	Time (days) for 50% reduction in concentration
EC50	Concentration required to produce an effect in 50% of organisms
Environmental Exposure Limit	Maximum concentration limit of a substance in an environmental medium, e.g., water, soil.
ERMA	Environmental Risk Management Authority
ERP Guide	Dangerous Goods – Initial Emergency Response Guide SNZ HB 76:2008
HAZCHEM Code	Emergency action code for emergency services
HAZNOTE	A brief document providing hazardous substance information for transport, storage and emergency management purposes
HSNO	Hazardous Substances and New Organisms
LC50	Concentration that will kill 50% of organisms
LD50	Dose that will kill 50% of organisms
MTQ	Maximum Transport Quantity. The maximum amount of dangerous goods that can be transported by road by the user
Partition Co-Efficient Kow	Ratio of concentration between octanol and water. Values are given as the log value. A high value indicates a substance may bioaccumulate
Record Keeping	Spray diary
STEL	Short term exposure level
Tolerable Exposure Limit	Maximum concentration limit of a substance above which persons must not be exposed

Tracking

For some hazardous substances, a record must be kept of the transport, storage, sale and use of the product

TWA

Time weighted average

Workplace Exposure standard

An occupational health standard limiting concentrations of specified substances to which persons are exposed

Please Note

Users must ensure that the most up to date version of this safety data sheet is used.

This Safety Data Sheet summarises information on this product, and how to safely handle and use the product. Each user should familiarise themselves with the product label, HazNote and Safety data Sheet, and consider the information in the context of how the product will be handled and used, including in conjunction with other products. Orion Crop Protection Ltd assumes no responsibility for the accuracy, completeness or suitability of this information. The user is responsible for determining the suitability and accuracy of this information for their particular purposes.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Always read the product label before use.