



Infosafe No™ 3NUD0	Issue Date :November 2010	ISSUED by NUFARM
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Product Name **MALLET Turf and Ornamental Insecticide**

Not classified as hazardous

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name MALLET Turf and Ornamental Insecticide

Product Code 1164

Product Type Group 4A Insecticide

Company Name NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)

Address 103-105 Pipe Road Laverton North
Victoria 3026 Australia

Emergency Tel. 1800 033 498 (24hr Australia)

Telephone/Fax Number Tel: +61 3 9282-1000
Fax: +61 3 9282-1001

Recommended Use For the control of a range of insect pests in turf and ornamental situations as per the Directions for Use table on the label.

Other Information This MSDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

2. HAZARDS IDENTIFICATION

Hazard Classification Not classified as hazardous
NON-HAZARDOUS SUBSTANCE.
NON-DANGEROUS GOODS.
Hazard classification according to the criteria of NOHSC.
Dangerous goods classification according to the Australia Dangerous Goods Code.

Risk Phrase(s) Not classified as hazardous

Other Information Poisons Schedule S5

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Liquid

Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Imidacloprid	138261-41-3	200 g/L
	Glycerine	56-81-5	10-30 %
	Other ingredients (considered non-hazardous)		0-10 %
	Water		Balance

4. FIRST AID MEASURES

Inhalation Remove affected person to fresh air until recovered.
If symptoms develop or persist, seek medical advice.

Ingestion Rinse mouth and then drink plenty of water.
Do not give anything by mouth to a semi-conscious or unconscious person.
Seek medical advice immediately.

Skin Remove contaminated clothing and launder before re-use.
Wash affected areas thoroughly with soap and water.

Eye If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.
Seek medical advice.

First Aid Facilities If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.

Advice to Doctor Treat symptomatically.
Has a nicotine like effect.
Check blood pressure and pulse rate frequently, as bradycardia and hypotonia are possible. Provide supportive measures for respiratory function and cardiac action. Give artificial respiration if signs of paralysis appear.
Additional therapeutic measures involve elimination of the substance from the

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body or acceleration of its excretion (gastric lavage, saline laxatives, activated charcoal).

Contra-indications:

Absorption promoting agents such as alcoholic beverages and milk.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Water fog, foam, carbon dioxide or dry chemical.
Hazards from Combustion	May emit toxic fumes of hydrogen chloride, hydrogen cyanide, carbon monoxide and nitrogen oxides if involved in fires or exposed to extreme heat.
Special Protective Equipment for fire fighters	Breathable air apparatus should be worn when fighting a fire in which this product is involved.
Specific Hazards	Considered low risk due to water content, however upon evaporation of water the product is combustible.
Other Information	STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal	Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect spilled material and waste in sealable open-top type containers for disposal.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.

7. HANDLING AND STORAGE

Conditions for Safe Storage	Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight.
Other Information	Always read the label and any attached leaflet before use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	NOHSC has set the following exposure standard for glycerine : TLV (TWA) 10 mg/m ³ , STEL -.
Engineering Controls	Handle in well ventilated areas, generally natural ventilation is adequate.
Personal Protective Equipment	It is good practice to wear suitable personal protective equipment (PPE). When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles.
Hygiene Measures	After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash contaminated clothing and safety equipment.
Requirements Concerning Special Training	Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid
Appearance	Beige liquid suspension
Solubility in Water	Disperses in water.
Specific Gravity	1.108
pH Value	6.5 - 7.5 in a 1% solution
Vapour Pressure	9 x 10 ⁻⁷ mPa @ 25°C (imidacloprid)
Octanol/Water Partition Coefficient	Kow Log P is 0.57 @ 21°C (imidacloprid)
Flammability	Not flammable

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10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Hazardous Reactions	Keep away from strong oxidising agents.
Hazardous Polymerization	Hazardous polymerisation is not possible.

11. TOXICOLOGICAL INFORMATION

Inhalation	Inhalation of sprays or mists may result in effects described under ingestion.
Ingestion	Swallowing large quantities may cause vomiting, diarrhoea, abdominal pain, lethargy, depressed muscular tone, muscular cramps, respiratory disturbances and trembling.
Skin	May irritate the skin.
Eye	May irritate the eyes.
Chronic Effects	Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.
Acute Toxicity - Oral	LD50 (rat) >5,000 mg/kg for the formulated product
Acute Toxicity - Dermal	LD50 (rat) >2,000 mg/kg for the formulated product
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >0.56 mg/l for the formulated product No toxic signs, pre-terminal deaths or post mortem abnormalities were observed.
Eye Irritation	Mild eye irritant.
Skin Irritation	Mild skin irritant.
Other Information	The Australian Acceptable Daily Intake (ADI) for imidacloprid for a human is 0.06 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 6 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing Office of Chemical Safety, 'ADI List', December 2008).

12. ECOLOGICAL INFORMATION

Other Precautions	Do not spray on vegetation where honeybees are foraging. Do not graze any treated turf or feed turf clippings from any treated area to poultry or livestock. Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
Environ. Protection	Spray drift can cause damage, read the label for more information.
Acute Toxicity - Fish	The following is data for the active ingredient, imidacloprid. LC50 (96hr) for rainbow trout is 211 mg/l.
Acute Toxicity - Daphnia	LC50 (48hr) for daphnia magna is 85 mg/l.
Acute Toxicity - Algae	EC50 (48hr) for pseudokirchneriella subcapita is >100 mg/l.
Acute Toxicity - Other Organisms	LD50 for japanese quail is 31 mg/kg LD50 for bobwhite quail is 152 mg/kg Harmful to bees by direct contact.

13. DISPOSAL CONSIDERATIONS

Product Disposal	On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®).
Container Disposal	Do not use this container for any other purpose. Triple rinse containers, add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. If recycling, replace cap and return clean containers to recycler or designated collection point.



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If not recycling, puncture or shred and bury containers in local authority landfill.
If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.
Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

Storage and Transport Considered non dangerous for road and rail transport (in packaging, including IBCs not greater than 3000 Lt each) by the Australian Code for the Transport of Dangerous Goods by Road and Rail. Ref: ADG7; SP No. AU01.

UN Number (Sea Transport) For bulk shipments as Class 9, use UN 3082, HazChem code 2Z.
3082

IMO Class/Packing Group Class 9;

IMO Marine Pollutant Marine Pollutant

IMO Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(contains Imidacloprid)

15. REGULATORY INFORMATION

Poisons Schedule S5

Packaging & Labelling CAUTION
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

AICS (Australia) All of the components in this product are listed on the Australian Inventory of Chemical Substances.

16. OTHER INFORMATION

Date of preparation or last revision of MSDS Revised 15/11/2010

Contact Person/Point Normal Hours: Mrs Kathleen Marsh Phone: +61 3 9282 1000
After Hours: Shift Supervisor Phone: 1800 033 498

Revisions Highlighted The MSDS was reviewed. Changes made to sections:
5 - other information;
9 - pH value included;
14 - transport information.
...End Of MSDS...

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