



# Material Safety Data Sheet

Infosafe No. 3NUD0 Issue Date : July 2006 ISSUED by NUFARM

Product Name : **MALLET Turf and Ornamental Insecticide**

## 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.** 24hr 1800 033 498  
**Telephone/Fax Number** Tel: (03) 9282-1000 Fax: (03) 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** NON-HAZARDOUS SUBSTANCE.  
NON-DANGEROUS GOODS.  
Hazard classification according to the criteria of NOHSC.  
Dangerous goods classification according to the Australia Dangerous Goods Code.  
**Other Information** Poisons Schedule S5

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Characterization** Liquid

<b>Ingredients</b>	<b>Name</b>	<b>CAS</b>	<b>Proportion</b>
	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 Poisons Information Centre on 13 11 26 (Australia).



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**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 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 Products** 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.

**Hazchem Code** None Allocated

**Other Information** Contain fire water.  
Prevent 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<sup>3</sup>, 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** NSW regulations require that people who use pesticides in their job or business must have training in the application of the materials. By 1st September, 2005 all users must have received such training.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form** Liquid

**Appearance** Beige liquid suspension

**Solubility in Water** Disperses in water.



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**Specific Gravity** 1.108  
**Vapour Pressure**  $9 \times 10^{-7}$  mPa @ 25°C (imidacloprid)  
**Octanol/Water Partition Coefficient** Kow Log P is 0.57 @ 21°C (imidacloprid)  
**Flammability** Not flammable

## 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, 'ADI List', TGA, September 2005).

## 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 (96 hr) for rainbow trout is 211 mg/l.  
**Acute Toxicity - Daphnia** LC50 (48 hr) 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 (ChemCollect).



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**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.  
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

**U.N. Number** None Allocated

**DG Class** None Allocated

**Hazchem Code** None Allocated

**Packing Group** None Allocated

**Storage and Transport** Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

## 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

**Contact Person/Point** Normal Hours: Mr Volker Maier Phone: (03) 9282 1000  
After Hours: Shift Supervisor Phone: 1800 033 498

**Revisions Highlighted** First Issue  
...End Of MSDS...