Infosafe No™ NU00H	Issue Date :August 2016	ISSUED by NUFARM

Product Name **AMITROLE T Herbicide**

Classified as hazardous

1. Identification

GHS Product Identifier	AMITROLE T Herbicide
Product Code	0085
Product Type	Group Q Herbicide
Company Name	NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
Address	103-105 Pipe Road Laverton North Victoria 3026 Australia
Telephone/Fax Number	Tel: +61 3 9282-1000 Fax: +61 3 9282-1001
Emergency phone number	1800 033 498 (24hr Australia)
Recommended use of the chemical and restrictions on use	For the control of weeds in orchards, vineyards, irrigation ditches and drains, eucalyptus and pine plantations, roadsides, pre-plant wheat and barley, and for general industrial situations as per the Directions for Use table on the label.
Other Information	This Safety Data Sheet describes the properties of the concentrated product. The physical properties and the assessments may not apply to the properties of the product once it has been diluted for application.

2. Hazard Identification

GHS classification of the substance/mixture	TR1 Toxic to Reproduction: Category 1 RE1 STOT Repeated Exposure Category 1 AC2 Hazardous to the Aquatic Environment - Long-Term Hazard: Category 2
Signal Word (s)	DANGER
Hazard Statement (s)	H361 Suspected of damaging fertility or the unborn child. H372 Causes damage to organs through prolonged or repeated exposure (thyroid). H411 Toxic to aquatic life with long lasting effects.
General Precautionary Statement (s)	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use.
Pictogram (s)	Health hazard, Environment, The below pictograms are GHS Hazard symbols for workplace use only. See SECTION 14 for Dangerous Goods information.





Precautionary statement – Prevention	P202 Do not handle until all safety precautions have been read and understood. P281 Use personal protective equipment as required. P260 Do not breathe spray. P264 Wash hands and exposed skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product.
Precautionary statement – Response	P308+P313 IF exposed or concerned: Get medical advice/attention.
Other Information	Poisons Schedule S5

3. Composition/information on ingredients

Ingredients	Name	CAS	Proportion
	Amitrole (3-amino-1,2,4-triazole)	61-82-5	250 g/L
	Ammonium thiocyanate	1762-95-4	220 g/L
	Water		Balance

4. First-aid measures

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Inhalation	Remove affected person to fresh air until recovered. Obtain medical advice.
Ingestion	If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Aust). Make every effort to prevent vomit from entering the lungs by careful placement of the patient.
Skin	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water. Remove contaminated clothing and launder before re-use.
Eye contact	If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes. If irritation persists consult a doctor.
Advice to Doctor	Treat symptomatically. Note that ingestion of ammonium thiocyanate may create symptoms similar to iodism or bromide intoxication.

5. Fire-fighting measures

Suitable extinguishing media	If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.
Hazards from Combustion Products	Non-combustible. If involved in a fire, the dehydrated components may emit oxides of nitrogen and oxides of sulphur.
Special Protective Equipment for fire fighters	Breathable air apparatus may have to be worn in confined spaces.
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. Dispose of at a landfill in accordance with local regulations. If possible, ring 1800 033 498 for specialist advice.
Environmental Precautions	Prevent from entering drains, waterways or sewers. This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

7. Handling and storage

Conditions for safe storage, including any incompatabilities	Store in the closed, original container in a dry, well ventilated area out of direct sunlight. Do not store in the same area as acids. Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.
Tank Cleaning	Thoroughly flush all spray equipment with water following the use of this product and before use with other products.
Other Information	Always read the label and any attached leaflet before use.

8. Exposure controls/personal protection

Occupational exposure limit values

Name	STEL		TWA		
	mg/m3	ppm	mg/m3	ppm	Footnote
Amitrole (3-amino-1,2,4-triazole)			0.2		

Appropriate engineering controls	Natural ventilation is sufficient when handling concentrate and preparing spray solution.
Personal Protective Equipment	It is good practice to wear suitable personal protective equipment (PPE). When opening the container and preparing the spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or goggles. When using the prepared spray wear cotton overalls buttoned to the neck and

Hygiene Measures	wrist and a washable hat, elbow-length PVC gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. Wash contaminated clothing before re-use. Wash goggles and gloves before storage and re-use.

9. Physical and chemical properties

Appearance	Brown liquid.
Melting Point	<0°C
Boiling Point	>100°C
Solubility in Water	Soluble in water.
Specific Gravity	1.12
pH	6.6 - 6.9
Vapour Pressure	Amitrole is not volatile
Volatile Component	63%
Flash Point	Not applicable for water based formulation
Flammability	Product is not a combustible liquid - a water based solution.
Flammable Limits - Lower	Not applicable

10. Stability and reactivity

Chemical Stability	Stable under normal conditions.
Incompatible Materials	Corrosive to iron, steel, copper and brass. Reaction with acids can liberate a very toxic gas.
Possibility of hazardous reactions	Violent reactions between thiocyanates and oxidising agents are possible.
Hazardous Polymerization	Hazardous polymerisation is not possible.

11. Toxicological Information

Acute Toxicity - Oral	Acute toxicity estimate (ATE) for the product is >2000 mg/kg .
Acute Toxicity - Dermal	LD50 rat >10000 mg/kg
Ingestion	The concentrate is harmful if swallowed. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. However, swallowing of large amounts may cause injury, mainly due to ammonium thiocyanate. Possible symptoms of exposure of the concentrate include: nausea, vomiting, diarrhoea, convulsions and possibly skin rashes or eruptions..
Inhalation	Not a likely route of exposure when handling the concentrate. However, care should be taken to avoid the inhalation of excessive amounts of spray mist during field spraying, respiratory irritation may occur.
Skin	The concentrated product may cause slight irritation on contact. Prolonged contact with the concentrate may cause irrritation and cause skin eruptions. Acute dermal toxicity has not been determined for this product; based on data available for its components, dermal toxicity is expected to be low.
Eye	The concentrate may cause irritation of the eyes. Extent of potential injury is not known.
Reproductive Toxicity	Evidence from animal studies suggests the potential for developmental toxicity for amitrole.
Chronic Effects	Chronic Exposure: For Amitrole: Based on the results of animal studies, liver and thyroid effects may result. The weight of evidence is that amitrole is not carcinogenic. For Ammonium Thiocyanate: Ingestion of this substance may lead to an effect

	that mimics iodism, ie a condition resulting from an overdose of iodine, characterised by running eyes and nose, salivation and skin eruptions.
Serious eye damage/irritation	Mild eye irritant.
Mutagenicity	Laboratory studies are not conclusive, some positive, some negative.
Skin corrosion/irritation	Mild skin irritant.
Other Information	The Australian Acceptable Daily Intake (ADI) for amitrole for a human is 0.0003 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.025 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 2015).

12. Ecological information

Persistence and degradability	Half life in soil is typically 14 days. Loss from soil is principally by microbial degradation.
Environmental Protection	Spray drift can cause damage, read the label for more information.
Acute Toxicity - Fish	Not toxic to fish.
Acute Toxicity - Other Organisms	Not toxic to bees. Not toxic to birds.

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 or preferably pressure rinse inner bladder or containers before disposal. Add rinsings to the spray tank. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and deliver empty packaging for appropriate disposal at an approved waste management facility. drumMUSTER is the national program for the collection and recycling of empty, cleaned, non returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMUSTER symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program. Returnable containers: empty contents fully into application equipment. Replace cap, close all valves and return to the point of supply for refill or storage. Empty containers and product should not be burnt.

14. Transport information

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
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

Regulatory Information	Australia: WHS regulations (2011) - Schedule 11: classification not listed.
Poisons Schedule	S5
Packaging & Labelling	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Other Information	This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA). APVMA product number: 31236.

16. Other Information

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Date of preparation or last revision of SDS	Reviewed 19/08/2016 This SDS replaces document dated May 2013.
Contact Person/Point	Normal Hours: Mrs Kathleen Marsh Phone: +61 3 9282 1000 After Hours: Shift Supervisor Phone: 1800 033 498
Revisions Highlighted	The SDS was reviewed to include GHS requirements.

...End Of MSDS...

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