

Section 1 - Identification of Chemical Product and Company

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Trade Name: Nuvox Titan 14-0-22

Product Use: Turf fertiliser

Creation Date: March 2008

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is not classified as hazardous to health according to the criteria of ASCC Australia.

Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

Risk Phrases: Not Hazardous according to criteria of Worksafe Australia

Safety Phrases: Not Hazardous according to criteria of Worksafe Australia.

SUSDP Classification: N/A

ADG Classification: None allocated. Not a Dangerous Good.

UN Number: None allocated

Emergency Overview

Physical Description & colour: Brown granular solid

Odour: Slight acidic odour

Major Health Hazards: No significant risk factors have been found for this product.

Potential Health Effects

Inhalation: Data suggests that this product should present no significant problems to typical persons if used as intended. Dusty conditions may cause mechanical aggravation to respiratory mucous membranes

Skin Contact: Data suggests that this product should present no significant problems to typical persons if used as intended. Slight dermal abrasion is possible with prolonged contact, especially around cuffs and collars.

Eye Contact: Dust from this product may cause particulate discomfort to eyes. It is likely to cause mild discomfort such as watering and redness of the eyes. However, this should quickly disappear once exposure is over and is unlikely to cause any significant lasting effects. However, avoid contact with eyes

Ingestion: Data suggests that this product should present no significant problems to typical persons if used as intended. Ingestion of large amounts may cause gastrointestinal disorder, nausea, diarrhoea, vomiting, or formation of methaemoglobin.

Carcinogen Status:

ASCC: No significant ingredient is classified as carcinogenic by ASCC at stated concentration.

NTP: No significant ingredient is classified as carcinogenic by NTP at stated concentration

IARC: No significant ingredient is classified as carcinogenic by IARC at stated concentration

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc.%	TWA (mg/m3)	STEL (mg/m3)
Non hazardous inorganic fertiliser *		100	not set	not set
Includes Urea	57-13-6		not set	not set
Methylene Urea	9011-05-6		not set	not set
Potassium Sulfate	7778-80-5		not set	not set
Ferrous Sulfate	7720-78-7		not set	not set

*This includes listed plus salts and other ingredients to provide macro and micro elemental requirements for strong healthy growth. This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5

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day working week. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call.

Inhalation: If vapours or mists have been inhaled, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists for more than about 30 minutes, seek medical advice

Skin Contact: If product gets on skin, thoroughly wash contacted areas. No further measures should normally be required unless irritation is noticed. If irritation persists, seek medical attention.

Eye Contact: Immediately irrigate with copious amounts of lukewarm, gently flowing water for 15 – 20 minutes or until the product is removed or irritation has ceased, while holding the eyelid(s) open. Obtain medical advice if irritation becomes painful or lasts more than a few minutes.

Ingestion: Give a glass of water if affected person able to drink. Do not induce vomiting unless instructed to do so by medical advice.

Notes to Doctor: Treat symptomatically. Note the nature of this product.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

Extinguishing Media: Not Combustible. Use extinguishing media suited to burning materials.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade.

Flash point: Does not burn.

Upper Flammability Limit: Does not burn.

Lower Flammability Limit: Does not burn.

Auto ignition temperature: Not applicable - does not burn.

Flammability Class: Does not burn.

Fire Decomposition: Fire decomposition products from this product may form toxic mixtures in confined spaces. During extremely high temperature fire conditions, the product may reach melting point and decompose to release oxides of sulfur, phosphorus, NH₃, or CN.

Section 6 - Accidental Release Measures

Accidental release: Minor spills do not normally need any special cleanup measures. Avoid dust formation. As a minimum, wear overalls, goggles and gloves. Suitable materials for protective clothing include rubber, PVC. If there is a significant chance that dusts are likely to build up in the cleanup area, we recommend that you use a respirator.

In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear overalls, goggles and gloves. Stop leak if safe to do so, and contain spill. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Dispose of only in accord with all regulations. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail.

Section 7 - Handling and Storage

No special storage and transport requirements. This product has no UN classification.

Handling: Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: Store in a cool, dry place away from children and animals or foodstuffs. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames, and make sure that the product does not come into contact with substances listed under "Materials to avoid" in Section 10.

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

Exposure Limits	TWA (mg/m ³)	STEL (mg/m ³)	ADI	NOEL
	not set	not set	not set	not set

A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by Worksafe Australia for any of the major ingredients in this product. There is a blanket limit of 10mg/m³ for dusts or mists when limits have not otherwise been established. The nature of this product makes it unlikely that this level will be approached in normal use.

ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level.

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: Avoid high dust concentrations and provide local exhaust ventilation where necessary.

Eye Protection: Eye protection such as protective glasses or goggles is recommended when this product is being used.

Skin Protection: Wear PVC gloves to prevent skin contact. Wear overall and long sleeves to prevent contact

Respirator: It is usually safe to not use a dust mask or respirator protection on account of this product, unless high concentration of dust evident.

Provision of eye wash facilities and safety shower recommended.

Wash hands before eating, drinking, smoking or going to toilet, launder protective clothing before re-use.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Brown Granular solid
Odour:	Slight acidic odour
Boiling Point:	N/A
Melting Point:	No data - solid at room temperature
Volatiles:	N/A
Vapour Pressure:	N/A.
Vapour Density:	No data.
Density	1730kg/m ³
Water Solubility:	60gm/100gm @25°C
pH:	No data.
Volatility:	N/A.
Odour Threshold:	No data.
Evaporation Rate:	N/A
Coeff Oil/water distribution:	No data
Flash Point	Not flammable
Auto ignition temp:	N/A - does not burn.

Section 10 - Stability and Reactivity

Reactivity: This product is stable under normal temperatures and pressures, when stored and handled in accordance with this MSDS

Conditions to Avoid: Store away from heat or fire

Incompatibilities: Strong oxidising agents. Prolonged contact may cause oxidation of unprotected metals.

Polymerisation: Will not occur

Fire Decomposition: Fire decomposition products from this product may form toxic mixtures in confined spaces. During extremely high temperature fire conditions, the product may reach melting point and decompose to release oxides of sulfur, phosphorus, NH₃, or CN.

Section 11 - Toxicological Information

Eye Effects: Mild **Skin Effects:** Mild **Dermal LD₅₀:** No data
Oral LD₅₀ (rat) 3000 mg/kg for Ammonium Sulfate; (rat) 2430 mg/kg for Potassium Chloride
Inhalation LC₅₀ No data.
Positive Teratogen or Mutagen: No **Potential Carcinogen (IARC or OSHA):** No

Section 12 - Ecological Information

Environmental Data: No data **Ecotoxicological Information:** No data

Section 13 - Disposal Considerations

Disposal: Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.

Section 14 - Transport Information

ADG Code: This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are to be found in the public AICS Database.

Section 16 - Other Information

This MSDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail
AICS	Australian Inventory of Chemical Substances
ASCC	Australian Safety & Compensation Council
CAS number	Chemical Abstracts Service Registry Number
Hazchem Number	Emergency action code of numbers and letters that provide information to emergency services especially fire-fighters
IARC	International Agency for Research on Cancer
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
SUSDP	Standard for the Uniform Scheduling of Drugs & Poisons
UN Number	United Nations Number

THIS MSDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS MSDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product. This MSDS is prepared in accord with the NOHSC document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2011(2003)]

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