

1. PRODUCT IDENTIFIER & IDENTITY FOR THE CHEMICAL

Product Name: **NutriMAX Triple Feed NPK**

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Emergency Contact
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0408 268 058

Poisons Information Centre:
13 11 26 (Australia)

CAS Number	Mixture	Product Code	NMTRIPLE
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Other Names: Liquid NPK fertiliser.

Product Use: Recommended for use as a plant a crop fertiliser only. See product label for application recommendations. A high analysis liquid nitrogen, phosphorous, potassium solution with trace nutrients, biostimulants, soil conditioners for plant and soil health.

2. HAZARD IDENTIFICATION

Classified as Non-Hazardous

in accordance with Safe Work Australia - Hazardous Chemicals Information System (HCIS) Australia, Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

NOT Classified as a Scheduled Poison

in accordance with the Standard for the Uniform Scheduling of Medicines and Poison (SUSMP) Australia.

NOT Classified as Dangerous Goods

in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

GHS	Non-Hazardous
SUSMP	Not a Scheduled Poison
ADG	Not Dangerous Goods

GHS Classification

Hazard Categories Not applicable

Signal Word Not applicable

Hazard Statements Not applicable

Precautionary Statements – General, Prevention, Response, Storage and Disposal

General

P101 + P102 + P103 If medical advice is needed, have the product container or label on hand. Keep out of reach of children. Read label before use.

Disposal

P501 Dispose of contents and container to an approved waste disposal plant in accordance with local regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Product name	NutriMAX Triple Feed NPK		SDS Code	8038
Product use	A liquid NPK solution for use as a plant/crop fertiliser.			
Ingredients	Name	CAS Number	Proportion w/w	
	Microbial Ferment (non-hazardous)	Mixture	30.0%	
	Ammonium and Potassium Phosphates	Mixture	40.0 – 50.0%	
	Urea (Carbamide)	57-13-6	15.0 - 20.0%	
	Proprietary Ingredients (non-hazardous)	Mixture	<10.0%	

4. FIRST AID MEASURES

Description of necessary first aid measures

Inhalation

Unlikely route of exposure, but if applicator feels drowsy, dizzy, tired or experiencing headaches, remove oneself to fresh air. If symptoms develop or persist seek medical attention.

Ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth out with water and give plenty of water to drink. Consult a doctor if any symptoms occur.

Eyes

Rinse cautiously with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing until all contaminants are washed out completely. Consult a doctor if any irritation occurs.

Skin and hair

If skin contact occurs, wash skin and hair with soap and plenty of water. Consult a doctor if any skin irritation occurs.

First aid facilities

Clean water supply, soap or skin cleaner and eyewash.

Advice to doctor

If poisoning occurs, consult with the Poisons Information Centre (telephone **13 11 26**). Have a copy of this safety data sheet or label available. Treat symptomatically.

Symptoms caused by exposure

May cause irritation of the skin, mucous membranes and abrasions.

Medical attention and special treatment

Wash exposed skin and hair with water and soap. If swallowed give plenty of water. If in eyes flush continuously with running water for at least 15 minutes.



5. FIRE FIGHTING MEASURES

Suitable extinguishing equipment AS 2444:2001

Appropriate extinguishing media includes water, water spray, foam, dry chemical or carbon dioxide. Use extinguishing media suitable for the surrounding fire and environment.

Specific hazards arising from the chemical fire

Combustion and decomposition products may include nitrogen oxides (NO_x), carbon monoxide (CO) and carbon dioxide (CO₂). Gases generated in combustion may be corrosive, poisonous or irritating.

Special protective equipment and precautions for fire fighters

Wear self-contained breathing apparatus if necessary and normal protective firefighting clothing.
No HAZCHEM Code assigned.



Further information Clear fire area of all non-emergency personnel.

Flash Point	No data available
Lower Explosion Limit	No data available
Upper Explosion Limit	No data available
Auto Ignition Temperature	No data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Product is non-hazardous. For personal protection see section 8. No emergency procedures required.

Environmental precautions Prevent from entering waterways, sewage and drains. For any queries consult Local Statuary Authorities.

Methods and materials for containment and cleaning up Cover drains. Contain spills and absorb onto absorbent material, dry sand or earth. Sweep and shovel into suitably labelled, closed containers for disposal.



7. HANDLING and STORAGE

Precautions for safe handling Keep out of reach of children. Use personal protective equipment. For personal protection see section 8. Avoid contact with skin and eyes. Avoid formation of mists or sprays. After use and before eating, drinking or smoking, wash all exposed skin and hair with soap and water.

Conditions of safe storage and incompatibilities Containers must be clearly labelled. Store in a cool place. Keep container tightly closed and out of direct sunlight. Keep away from strong oxidising agents.

Specific end uses Apart from uses mentioned in section 1., no other specific uses are stipulated.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards OEL There are no assigned exposure standards for this product.

Exposure standards STEL There are no assigned exposure standards for this product.

Biological limited values There are no known Biological Limited Values that have been assigned.

Engineering controls Keep unused product in a sealed container. Avoid creating mists or sprays. Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and at the end of the work day.

Personal Protection

Inhalation Inhalation protection not required. Avoid creating mists or sprays.

AS –NZS 1716

Eye Face shield or safety glasses fitted with side shields must be worn at all times during the handling and application period. Do NOT wear contact lenses.

AS –NZS 1337

Gloves It is advisable to handle with impervious gloves. Gloves must be inspected prior to use. Wash and dry hands after use.

AS –NZS 2161



Footwear AS –Nzs 2210	It is advisable to wear enclosed footwear during the handling and application period
Clothing AS –Nzs 2919	It is advisable to wear protective clothing during handling. Suitable cotton overalls buttoned up at neck and wrists recommended.
Hearing AS –Nzs 1270	Hearing protection not required unless required with use of application equipment.
Other Requirements	The type of protective equipment must be selected according to the concentration and amount substance used at the specific workplace. Avoid unnecessary contact with eyes, skin and hair. After application, wash skin and hair thoroughly with soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Dark brown – liquid
Odour	Slight chocolate odour
Odour threshold	No data available
pH (10g/L @ 20°C)	7.05 – 7.35
Freezing point	No data available
Boiling point and boiling range	No data available
Melting point	Not applicable
Flash point	No data available
Evaporation rate	No data available
Flammability	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Bulk density or Specific Gravity	1.35 - 1.38 g/mL
Solubility	Miscible in water
Partition coefficient: n-octanol/water	No data available
Decomposition temperature	>100°C
Viscosity	No data available
Specific heat value	No data available
Particle size	Not applicable
Volatile organic compounds content	No data available
% volatile	No data available
Saturated vapour concentration	No data available
Release of invisible flammable vapours and gases	No data available
Flammability limits	No data available

10. STABILITY AND REACTIVITY

Reactivity	May react with strong oxidising agents.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Hazardous polymerisation will not occur.
Conditions to avoid	Extreme heat.
Incompatible materials	Strong oxidising agents.

Hazardous decomposition products

Decomposition products may include nitrogen oxides (NO_x), carbon monoxide (CO) and carbon dioxide (CO₂). Gases generated in combustion may be corrosive, poisonous or irritating. In the event of fire: see section 5.

11. TOXICOLOGICAL INFORMATION

Ingredient: Urea (57-13-36)		Information Sources: TOXNET - Hazardous Substances Data Bank
Concentration	15 - 20% by weight.	
Acute oral toxicity	LD ₅₀ oral (sheep) - 28.5g/100kg; LD ₅₀ oral (rat) - 8,471mg/kg OECD Test Guideline 420, 423 or 425 - no data available	
Acute dermal toxicity	OECD Test Guideline 402 - no data available	
Acute inhalation toxicity	OECD Test Guideline 403, 436 - no data available Urea would be a mild to moderate irritant if inhaled in an aerosol.	
Specific Target Organ Toxicity STOT - repeated exposure	No data available	
Specific Target Organ Toxicity STOT - single exposure	No data available	
Skin corrosion/irritation	Urea causes redness and irritation of skin.	
Serious eye damage/irritation	Urea causes redness and irritation of eyes.	
Respiratory or skin sensitisation	Not a skin sensitiser. Respiratory, no data available.	
Germ cell mutagenicity	OECD Test Guideline 474 - no data available	
Carcinogenicity	Not identified as a probable, possible or confirmed human carcinogen by IARC. OECD Test Guideline 451 - no data available	
Reproductive Toxicity	No data available	
Aspiration hazard	No data available	
Possible routes of exposure	Inhalation, dermal contact and ingestion.	
Signs and Symptoms of exposure	Adverse reactions include headache, nausea, vomiting, syncope, disorientation, transient confusion and electrolyte depletion (hyponatremia & hypokalaemia). The eye is permeable to urea, rebound elevation of intraocular pressure and vitreous vol may occur after ocular hypotensive effect has terminated.	
Other information	Urea is considered a mild to moderate intoxicant and a mild irritant. Eye damage is only expected when concentrations are high, or duration of exposure is extended. Massive occupational exposure produced persistent respiratory insufficiency. In ruminants unaccustomed to urea, ingestion of 0.3-0.5g urea/kg may be toxic.	

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Ectotoxicity	No data available
Persistence and Degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Other adverse effects	No data available

13. DISPOSAL CONSIDERATIONS

Spills

Prevent spills from entering drains, surface water and ground water. Collect all residues with absorbent material. After removal of residues wash down area with water. Disposal must be carried out in accordance with Local Statuary Authorities.

Material

Handle and dispose of in compliance with current environmental waste legislation. If in doubt, contact Local Statuary Authorities.

Contaminated Material

Empty containers may be suitable for reuse or recycling after cleaning and appropriate disposal of the cleaning agents. Disposal method dependent upon degree and nature of contaminated material. Disposal must be carried out in compliance with current environmental waste legislation. If in doubt seek professional advice or contact Local Statuary Authorities.

14. TRANSPORT INFORMATION

UN number	Not required under ADG Code		
Proper Shipping Name	NOT CONSIDERED DANGEROUS GOODS		
Transport Hazard Class	Not required under ADG Code	Subsidiary Risk	Not required under ADG Code
Packing Group	Not required under ADG Code		
Environmental hazards for transport purposes	Not a known marine pollutant according to IMDG Code. Not an Annexe I chemical according to MARPOL.		
Special precautions for user	Ensure packaging is not damaged and suitable for transport.		
Additional information	No additional information required by overseas regulatory agencies or regulations for the transport of goods by other modes.		
HAZCHEM	Not required according to ADG Code.		
IMDG	Not required according to IMDG Code.		



15. REGULATORY INFORMATION

Hazard Category	The product is Classified as Non-Hazardous in accordance with Safe Work Australia - Hazardous Chemicals Information System (HCIS) Australia, Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.		
Montreal Protocol	Not an ozone depleting substance.		
The Stockholm Convention	Not a persistent organic pollutant.		
The Rotterdam Convention	Not a banned pesticide or industrial chemical.		
Basal Convention	Not a hazardous waste.		
MARPOL	Not subject to Annexe III - not a harmful substance carried in packed form or a noxious liquid substance		
Safety, health and environmental regulations	SUSMP Classification	- Not Classified as a Schedule Poison	
	NICNAS	- No data available	

16. OTHER INFORMATION

This Safety Data Sheet conforms with the "PREPARATION OF SAFETY DATA SHEETS FOR HAZARDOUS CHEMICALS Code of Practice, DECEMBER 2011" by Safe Work Australia. To meet the GHS requirements under the WHS regulations in relation to the preparation of safety data sheets for hazardous chemicals.

SDS prepared 29th November 2018 version number 1.

Legend of Abbreviations and Acronyms

ADG - Australian Dangerous Goods Code for the Transport of Dangerous Goods by Road or Rail
AS/NZS - Australian Standards and New Zealand Standards
BCF - Bioconcentration Factor
CAS Number - Chemical Abstract Service Number
GHS - Globally Harmonised System
HSIS - Hazardous Substances Information System
IARC - International Agency for Research on Cancer
IERG - Initial Emergency Response Guide
IMDG - International Maritime Dangerous Goods
MARPOL - International Convention for the Prevention of Pollution from Ships
OECD - Organisation for Economic Co-operation and development (guidelines for testing of chemicals)
TWA - Time-Weighted Average
SDS - Safety Data Sheet
STEL - Short Term Exposure Limit
STOT - Specific Target Organ Toxicity
SUSMP - Standards for the Uniform Scheduling of Medicines and Poisons
UN Number - United Nations Number
°C - Degrees Celsius
EC₅₀ - Half maximal effective concentration
LD₅₀ - Median lethal dose; is the median dosage per unit bodyweight required to kill half the members of a tested population after specified test duration
LD₁₀ - Lethal dose low, is the lowest dosage per unit of bodyweight known to have resulted in a fatality in a particular animal species
LC₅₀ - Median lethal concentration; is the median dosage per unit body weight required to kill half the members of a tested population after a specified test duration.
mg/kg - Milligrams per kilogram
mg/L - Milligrams per litre
mg/m³ - Milligrams per cubic metre
pH - Potential of hydrogen (numeric scale to specify the acidity or basicity of an aqueous solution)
w/w - Weight per weight
% - Percent or percentage
< - Less than
> - Greater than
@ - at

Emergency Contacts
24 hours

LawrieCo Technical Manager:
0408 268 058

Poisons Information Centre:
13 11 26 (Australia)

Disclaimer

The data provided is to best of LawrieCo's knowledge and is believed to be accurate and reliable as of the date of issue. However, no expressed or implied warranties are given. LawrieCo cannot anticipate or control the conditions under which this information may be used. Therefore, it is the user's responsibility to satisfy themselves as to the suitability and completeness of such information for their particular use. It is the responsibility of the user to ensure that the issue is current. This information given is a non-controlled document.

Related Product Codes

NMTRIPLE1000
NMTRIPLE200
NMTRIPLE20
NMTRIPLE/L

Safety Data Sheet Revision

Issue Date: 29th November 2018
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End of Safety Data Sheet