



SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name CAMPBELLS NITRO P
Synonyms AMMONIUM POLYPHOSPHATE • AMMONIUM SALTS OF POLYPHOSPHORIC ACIDS • CAMPBELLS NITRO-P • NITRO - P • NITRO-P FERTILISER

1.2 Uses and uses advised against

Uses LIQUID COMPLEX FERTILIZER

1.3 Details of the supplier of the product

Supplier name CAMPBELLS FERTILISERS AUSTRALASIA PTY LTD
Address 18 Raymond Rd, Laverton North, Victoria, 3026, AUSTRALIA
Telephone (03) 9931 2211
Fax (03) 9931 2201
Email info@campbellsfert.com.au
Website <http://www.campbellsfert.com.au>

1.4 Emergency telephone numbers

Emergency (03) 9931 2211 (8.30am - 5pm Monday - Friday)
Emergency 0418 350 726 (At all other times)
Poison Information Centre 13 11 26

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

2.2 GHS Label elements

No signal word, pictograms, hazard or precautionary statements have been allocated.

2.3 Other hazards

Environmentally hazardous substance.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
MONOAMMONIUM PHOSPHATE	7722-76-1	231-764-5	9 to 10%
DIAMMONIUM HYDROGEN ORTHOPHOSPHATE	7783-28-0	231-987-8	8 to 9%
ALUMINIUM PHOSPHATE	7784-30-7	232-056-9	3 to 4%
AMMONIUM SULPHATE	7783-20-2	231-984-1	<2%
WATER	7732-18-5	231-791-2	38 to 45%
POLYPHOSPHORIC ACIDS, AMMONIUM SALTS	68333-79-9	269-789-9	35 to 37%
IRON (III) ORTHOPHOSPHATE	10045-86-0	233-149-7	3 to 4%

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
Inhalation	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
Ingestion	For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).
First aid facilities	Eye wash facilities and safety shower should be available.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Non flammable. May evolve toxic gases if strongly heated. May evolve nitrogen oxides and ammonia when heated to decomposition.

5.3 Advice for firefighters

No fire or explosion hazard exists.

5.4 Hazchem code

None allocated.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from incompatible substances.

7.3 Specific end uses

No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Aluminium & compounds	SWA [Proposed]	--	1	--	--
Aluminium, soluble salts (as Al)	SWA [AUS]	--	2	--	--
Iron salts, soluble (as Fe)	SWA [AUS]	--	1	--	--

Biological limits

No biological limit values have been entered for this product.

8.2 Exposure controls

Engineering controls Avoid inhalation. Use in well ventilated areas. Maintain vapour levels below the recommended exposure standard.

PPE

- Eye / Face** Wear splash-proof goggles.
- Hands** Wear PVC or rubber gloves.
- Body** When using large quantities or where heavy contamination is likely, wear coveralls.
- Respiratory** Not required under normal conditions of use.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	GREENISH-BROWN LIQUID
Odour	SLIGHT ODOUR
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	6 to 7
Vapour density	NOT AVAILABLE
Relative density	NOT AVAILABLE
Solubility (water)	> 100 g/L @ 20°C
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT RELEVANT
Lower explosion limit	NOT RELEVANT
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	> 150°C
Viscosity	NOT AVAILABLE
Explosive properties	NOT EXPLOSIVE
Oxidising properties	NON OXIDISING
Odour threshold	NOT AVAILABLE

9.2 Other information

Density	1.41 g/cm ³ to 1.47 g/cm ³ @ 20°C
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10. STABILITY AND REACTIVITY

10.1 Reactivity

Components (MAP, DAP) of this product can react with acids and alkalis.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

Incompatible with combustible materials, and reducing agents (e.g. sulphites). Incompatible with alkalis (e.g. sodium hydroxide) and acids (e.g. nitric acid).

10.6 Hazardous decomposition products

May evolve nitrogen oxides and ammonia when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Ingestion may result in gastrointestinal irritation, nausea, vomiting, abdominal pain and diarrhoea.

Information available for the ingredients:

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
MONOAMMONIUM PHOSPHATE	5,750 mg/kg (rat)	> 7,940 mg/kg (rabbit)	--
DIAMMONIUM HYDROGEN ORTHOPHOSPHATE	> 6500 mg/kg (rat)	< 7950 mg/kg (rabbit)	--
ALUMINIUM PHOSPHATE	> 5000 mg/kg (mouse)	> 4640 mg/kg (rabbit)	--
AMMONIUM SULPHATE	4,250 mg/kg (rat)	> 2000 mg/kg (rat)	--

Skin	Contact may result in irritation, redness, rash and dermatitis.
Eye	Contact may result in irritation, lacrimation, pain and redness.
Sensitisation	Not classified as causing skin or respiratory sensitisation.
Mutagenicity	Not classified as a mutagen.
Carcinogenicity	Not classified as a carcinogen.
Reproductive	Not classified as a reproductive toxin.
STOT - single exposure	Over exposure may result in irritation of the nose and throat, with coughing.
STOT - repeated exposure	Not classified as causing organ damage from repeated exposure.
Aspiration	Not classified as causing aspiration.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Short-term toxicity to fish:

MAP

LC50 for freshwater fish *Oncorhynchus mykiss* (96 h): > 85.9 mg/L

OECD Guideline 203 (Fish, Acute Toxicity Test)

DAP

LC50 for freshwater fish *Cirrhinus mrigala/Labeo rohita* (96 h): 1700 mg/L

Standard Methods for the Examination of Water and wastewater (APHA-1985)

Long-term toxicity to fish:

No long term toxicity testing is proposed, as the chemical safety assessment does not indicate a need to further investigate the effects on fish. All data available on MAP(DAP) itself and on the other phosphates show a very low toxicity of the substance.

Short-term toxicity to aquatic invertebrates:

EC50/LC50 for freshwater invertebrates *Daphnia carinata* (water flea): 1790 mg/L

Standard methods for the examination of water and wastewater. 14th ed., American Public Health Association, New York (1975)

Long-term toxicity to aquatic invertebrates:

No long term toxicity testing is proposed as the chemical safety assessment does not indicate a need to further investigate the effects on aquatic invertebrates. All data available on MAP(DAP) itself and on the other phosphates show a very low toxicity of the substance.

Algae and aquatic plants:

EC50/LC50 for freshwater algae: >100 mg/L

EC10/LC10 or NOEC for freshwater algae: 100 mg/L

Pseudokirchnerella subcapitata (reported as *Selenastrum capricornutum*) (algae)

OECD Guideline 201 (Algae, Growth Inhibition Test)

12.2 Persistence and degradability

Abiotic degradation: Not applicable .

Biotic degradation: In wastewater plant:

During the anaerobic transformation of ammonium, one group of bacteria oxidizes ammonium to nitrite while another group oxidizes nitrite to nitrate. The average biodegradation value in wastewater plant at 20°C is 52 g N/kg dissolved solid/day.

12.3 Bioaccumulative potential

MAP (DAP) has a low bioaccumulative potential. Due to the water solubility and the ionic nature, MAP (DAP) is not expected to be bioaccumulative.

12.4 Mobility in soil

Due to the water solubility and the ionic nature, MAP (DAP) is not expected to be adsorbed by soil and volatilize from soil. In soil, nitrification and de-nitrification processes occur as well as in secondary wastewater treatment processes.

12.5 Other adverse effects

Plant nutrients may be beneficial to plants at low levels, however high levels may cause reduced growth or burns in sensitive species. Excess may be washed through soil to waterways. Nutrients released to waterways may cause algal blooms, with potential for toxic effects on aquatic organisms.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal Dispose of to an approved landfill or waste processing site. Contact the manufacturer/supplier for additional information (if required).

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA



	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	None allocated.	None allocated.	None allocated.
14.2 Proper Shipping Name	None allocated.	None allocated.	None allocated.
14.3 Transport hazard class	None allocated.	None allocated.	None allocated.
14.4 Packing Group	None allocated.	None allocated.	None allocated.

14.5 Environmental hazards

Marine Pollutant.

14.6 Special precautions for user

Hazchem code None allocated.

Other information The environmentally hazardous substance mark is not required when transported in packages of less than 5 kg/L (UN Model Regulations: Special Provision 375; IATA: Special Provision A197; IMDG: Special Provision 969) or less than 500 kg/L by Australian Road and Rail.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Poison schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).

Inventory listings **AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals)**
All components are listed on AIIC, or are exempt.
NEW ZEALAND: NZIoC (New Zealand Inventory of Chemicals)
All components are listed on the NZIoC inventory, or are exempt.

16. OTHER INFORMATION

Additional information EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES: Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m ³	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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