



MATERIAL SAFETY DATA SHEET

PRODUCT: HYDRO PLUS – HYDROPONIC NUTRIENT FOR ALL PLANTS – 1L

Date of Issue: 03 MAY 2021 **Valid until:** 02 MAY 2026 **GHS Format**

1. IDENTIFICATION OF MATERIAL & SUPPLIER

Product Name: HYDRO PLUS – Hydroponic Nutrient for All Plants 1L

Other names: None

Manufacturer's code: MTO3109

Recommended use: as a liquid Fertiliser to supply all essential nutrients to promote healthy growth and production of all plants in hydroponic systems.

Manufacturer/Supplier Information:

Name: MANUTEC PTY LTD

Address: 30 Jonal drive, Cavan, South Australia 5094

Telephone No: +61-8-8260 2277 **Fax:** +61-8-8260 2399

Email: manutec@manutec.com.au

Emergency contact only: Poisons Information Centre (Australia) 131126

2. HAZARDS IDENTIFICATION

Poisons Schedule: None classified

Hazard Classification: NOT hazardous according to the criteria of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Hazard Categories: None specified

Pictograms: None specified

Signal Word: None specified

Hazard Statements: None specified

Precautionary Statements: None specified

National Transport Commission (Australia)

Dangerous Goods Classification

NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Proprietary formulation of various non hazardous ingredients mixed in water using following major ingredients

	<u>CAS Nos</u>	
Potassium Nitrate	7757-79-1	
Calcium Nitrate	10124-37-5	
Mono Ammonium Phosphate	7722-76-1	
Magnesium Nitrate	13446-18-9	
Chelated Micronutrient mix	N/A	
Food Coloring liquid	N/A	
Pure Water	N/A	to 100%

4. FIRST AID MEASURES

If poisoning occurs, please contact immediately Poisons Information Centre (Australia) on 131126

Ingestion:	Rinse mouth with water. If swallowed, don't induce vomiting. Give a glass of water to drink, but never give anything by mouth to unconscious person. If vomiting occurs give additional water. Seek medical advice immediately.
Eye:	Flush with flowing water for 10-15 minutes. If irritation persists, seek immediate medical advice.
Skin:	Remove contaminated clothing. Wash affected part with soap and clean water. Any symptoms such as swelling, redness, blister or irritation occurs, seek immediate medical attention.
Inhaled:	Remove victim to fresh air. Remove contaminated clothing and make victim comfortable position. Seek medical help if victim still uncomfortable and develop any symptoms.
Aid Facilities:	Poisons Information Centers in each State capital city may provide additional assistance (Ph 131126).
Advice to doctor:	No special advice, treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazchem code: Not applicable

Extinguishing media:

Material is non-combustible

Special protective equipment for firefighters:

On decomposition, may emit toxic fumes, so fire fighters to wear appropriate clothing and self contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Small spills: Ensure to wear appropriate protective gear (such as gloves/goggles) as appropriate and soak with a rag or paper towel or absorbent materials and dispose as general waste.

Large spills: Ensure to wear appropriate protective gear and collect in to properly

Labelled containers. Avoid material entering in to drainage or waterways.
Advice or contact local council or environmental authority as appropriate.

7. HANDLING AND STORAGE

- Avoid Skin, eye contact.
- Store in a dry, cool and ventilated place away from Children, pets and exposure to direct sunlight. Also store away from any incompatible materials described in section 10 of this safety data sheet.
- When not in use and after use, ensure to keep the container/bag sealed properly.
- If any spillage, follow appropriate action as described in section 6 of this data sheet.
- Store in original packaging as approved by the manufacturer

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures:

Proper Ventilation in place, particularly while handling larger volumes in Factory settings and use appropriate protective cloth

Control of exposition limit:

Respiratory protection: Keep ventilated and use mask during handling large volumes

Hand protection: Rubber or plastic gloves

Eye protection: Safety glasses

Skin protection: Use adequate cloth

Personal Protection in Manufacturing/Packing area:

Wear overalls, safety glasses and impermeable gloves. Avoid generating dust. If dust exists wear appropriate dust mask meeting requirements of AS/NZS 1715 Standards. Always wash hands after handling and before eating, smoking or drinking. Wash contaminated clothing before storing or reuse

Hygienic and personal protection practices while handling the product

Keep the material/product away from food and drink, animal feed.

When using, don't eat, drink or smoke

Wash hands or affected area thoroughly prior to eating, drinking or smoking

Avoid contact with skin, eye and inhalation of any dust from the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Colour:	Yellowish green
Odour:	mild ammonia smell
Melting Point:	Not applicable
Boiling Point:	Not applicable
Vapour Press kPa 025C:	Nil
Specific Gravity:	Not determined
Flashpoint (C):	Non flammable
Flammability Limits:	Non flammable
Solubility in water:	Completely miscible in water

10. STABILITY AND REACTIVITY

General Information	Product is a non-flammable liquid.
Chemical Stability	Product is stable under normal conditions of use, storage and temperature.
Conditions to Avoid	Avoid mixing or storing with food stuff
Materials to Avoid	none known
Hazardous Decomposition Products	
No data, but may be oxides of Nitrogen.	
Hazardous Polymerization	
Hazardous Polymerization has not been reported.	

11. TOXICOLOGICAL INFORMATION

In general when the product is used and handled safely and as per directions on the label and per safety data sheet instructions, no adverse effects are expected. However in case of mishandling or over ingestion of product, may result in symptoms of acute and Chronic effects.

Information on Toxicity: No published data or information available, however materials used in this product are considered non- hazardous.

ACUTE EFFECTS

Ingestion/Swallowed:	May cause gastric irritation and result in nausea & vomiting, however ingestion of large amounts may be harmful and dangerous.
Eye:	mild irritant on contact
Skin:	Prolonged exposure may cause mild irritation and dry skin, particularly to sensitive skins
Inhaled:	Non hazardous, but breathing mists/smell may be irritant to the respiratory track or mucous membrane.

Chronic Toxicity:

Mutagenicity:	No data/information available, but material considered non hazardous
Carcinogenicity	No data/information available, this material considered non hazardous
Specific Organ Toxicity	No information available but material considered non hazardous.

12. ECOLOGICAL INFORMATION

Eco toxicity	No data available
Mobility	Completely miscible in water.
Environmental Fate	Do NOT allow excessive product to reach waterways, drains and sewers.



Bioaccumulation Potential No information available on bioaccumulation for this product.

Environmental Impact No Data Available

13. DISPOSABLE CONSIDERATIONS

General Information Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.

14. TRANSPORT INFORMATION

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification

NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Marine Transport

Not classified as dangerous according to the criteria of International Marine Dangerous Goods (IMDG) for transport by sea.

Air Transport

Not classified as dangerous according to the criteria of International Air Transport Association (IATA) Dangerous Goods regulation for transport by air.

15. REGULATORY INFORMATION

Constituents or materials used in this product are covered by Australian Inventory of Chemical Substances (AICS)

Poisons Schedule (Aust) Not scheduled

16. OTHER INFORMATION

The MSDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

STATEMENT OF DISCLAIMER:

This Material Safety Data Sheet has been developed according to WHS Code of Practice Preparation of Safety Data Sheets for Hazardous Chemicals Guidelines and written in accordance with GHS format. All information is as accurate and up-to-date as possible. Since Manutec Pty Ltd cannot anticipate or control the conditions under which this information may be used, each user should review the information in the specific context of the intended application. Manutec Pty Ltd will not be responsible for damages of any nature resulting from use of or reliance upon this information.

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