



# MATERIAL SAFETY DATA SHEET

## PRODUCT: N.K. PLUS – HYDROPONIC FERTILISER FOR FRUIT& VEG – 1L

**Date of Issue:** 26 OCT 2018      **Valid until:** 26 OCT 2023      **GHS Format**

### 1. IDENTIFICATION OF MATERIAL & SUPPLIER

**Product Name:** N.K. PLUS – Hydroponic Fertiliser for Fruit & Vegetables 1L  
**Other names:** None  
**Manufacturer's code:** MTO3102  
**Recommended use:** as a liquid Fertiliser to supply all essential nutrients to promote healthy growth and production of FRUITS AND VEGETABLES.

**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	
Urea	57-13-6	
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

<b>Ingestion:</b>	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.
<b>Eye:</b>	Flush with flowing water for 10-15 minutes. If irritation persists, seek immediate medical advice.
<b>Skin:</b>	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.
<b>Inhaled:</b>	Remove victim to fresh air. Remove contaminated clothing and make victim comfortable position. Seek medical help if victim still uncomfortable and develop any symptoms.
<b>Aid Facilities:</b>	Poisons Information Centers in each State capital city may provide additional assistance (Ph 131126).
<b>Advice to doctor:</b>	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

<b>Form:</b>	Liquid
<b>Colour:</b>	Light red
<b>Odour:</b>	None specific
<b>Melting Point:</b>	Not applicable
<b>Boiling Point:</b>	Not applicable
<b>Vapour Press kPa 025C:</b>	Nil
<b>Specific Gravity:</b>	Not determined
<b>Flashpoint (C):</b>	Non flammable
<b>Flammability Limits:</b>	Non flammable
<b>Solubility in water:</b>	Completely miscible in water

## 10. STABILITY AND REACTIVITY

<b>General Information</b>	Product is a non-flammable liquid.
<b>Chemical Stability</b>	Product is stable under normal conditions of use, storage and temperature.
<b>Conditions to Avoid</b>	Avoid mixing or storing with food stuff
<b>Materials to Avoid</b>	none known
<b>Hazardous Decomposition Products</b>	
No data, but may be oxides of Nitrogen.	
<b>Hazardous Polymerization</b>	
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

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

### Chronic Toxicity:

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

## 12. ECOLOGICAL INFORMATION

<b>Eco toxicity</b>	No data available
<b>Mobility</b>	Completely miscible in water.
<b>Environmental Fate</b>	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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