

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** Multi-N  
**Other means of identification:** EC Fertiliser  
**Recommended use of the chemical and restrictions on use:** For foliar application to a wide variety of crops  
  
**Supplier:** Micromix Plant Health Ltd  
**Street Address:** Langar, Nottinghamshire NG13 9HP, UK  
**Telephone No:** +44 194 989 8001  
**Email:** info@micromix.com  
**Distributed by:** Tasman Bioconnect Ltd.  
**Emergency Telephone:** 24 hours National Poison Centre 0800 764 766

## 2. HAZARDS IDENTIFICATION

Classification of the substance mixture:



**WARNING.**

Harmful if swallowed  
 Causes serious eye irritation  
 May cause damage to kidneys through prolonged or repeated exposure

Wash hands thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Wear eye/face protection  
 Do not breathe spray

To avoid risks to human health and the environment, comply with the instructions for use. Hazard determining components for labelling are: Glycol

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	Chemical Name	CAS Number	Proportion (w/w)
Glycol	MONOETHYLENE GLYCOL	107-21-1	2.2%
Other ingredients determined not to be hazardous			to 100%

## 4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

**Inhalation:** No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air, and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.  
**Skin Contact:** No first aid measures normally required. However, if irritation has occurred, and irritation has developed, wash gently and thoroughly with warm water (use non-abrasive soap if

	necessary) for 10-20 minutes or until product is removed. If irritation persists, washing and seek medical attention.
<b>Eye Contact:</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists, get medical advice or attention.
<b>Ingestion:</b>	IF SWALLOWED: Call a Poisons Information Centre or doctor if you feel unwell. Rinse mouth.
<b>STOT:</b>	Get medical advice/attention if your feel unwell.
<b>First Aid Facilities:</b>	Eyewash and normal washroom facilities.
<b>Indication of immediate medical attention and special treatment needed:</b>	Treat symptomatically. There is no specific antidote available
<b>Symptoms</b>	The most important known symptoms and effects are described in the labelling (see section 2) and/or section 11. Further important symptoms and effects are so far not known.

## 5. FIRE FIGHTING MEASURES

<b>Suitable Extinguishing Media:</b>	Small fires: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide. Large fires: Use alcohol-resistant foam or water spray. DO NOT use a solid water stream as it may scatter and spread fire.
<b>Specific hazards arising from the substance or mixture:</b>	The components in this product may product and release toxic fumes on combustion. Exposure to decomposition products may be a hazard to health.
<b>Hazchem Code</b>	
<b>Special protective equipment and precautions for fire-fighters:</b>	Fire fighters should wear self-contained breathing apparatus and suitable protective clothing to prevent risk of exposure to products of decomposition. DO NOT allow runoff from firefighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Emergency procedures/ Environmental precautions:</b>	Collect the spillage. Prevent further spillage and product from entering waterways. Prevent the product or spilled material from entering water bodies. Wipe up spilled material and place in sealable waste container labelled for disposal. Wash down affected area with water and detergent. Absorb and collect washings and place in sealable waste container. Dispose of safely.
<b>Personal precautions/ Protective equipment:</b>	Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Ventilate spillage area.
<b>Methods and materials for containment and cleaning up:</b>	Contain - prevent run off into drains and waterways. Procedure for spill: <ol style="list-style-type: none"> <li>(1) Keep all bystanders away</li> <li>(2) Wear full length clothing and PVC gloves</li> <li>(3) Reposition any leaking containers to minimise leakage</li> <li>(4) Sweep spilt material into a pile</li> <li>(5) Shovel into drums</li> <li>(6) Disposal of material will depend upon the extent of the spill:           <ul style="list-style-type: none"> <li>• For quantities up to 50 kg of product bury in a secure landfill site.</li> <li>• For quantities greater than 50 kg seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established.</li> </ul> </li> </ol>

(7) Decontaminate spill area with detergent and water and rinse with the smallest volume of water practicable.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** No special measures necessary if stored and handled correctly. Keep containers closed at all times - check regularly for leaks or spills. Transport and store upright. Avoid skin and eye contact. Keep out of reach of children. Do not eat, drink, or smoke in contaminated areas. Always remove contaminated clothing and wash hands before eating, drinking, smoking, or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

Storage and application must be as described in the current version of the New Zealand standard for the Management of Agrichemicals NZS8409.

**Approved Handler**

Not relevant.

**Record Keeping**

**Conditions for safe storage, including any incompatibilities:**

Store in the original container, in a cool dry well-ventilated, locked place out of the reach of children. DO NOT store in direct sunlight. DO NOT store at temperatures exceeding 35°C. Keep containers closed when not in use - check regularly for leaks.

**AGGREGATE STORAGE VOLUME THRESHOLDS:** When stored with substance of the same hazard the aggregate quantity must be considered. For Full details refer to the current standard NZ8409 Management of Agrichemicals or the HSNO Regulations.

Location Certificate*	Hazardous Atmosphere Zone	Fire Extinguisher:	Signage [Hazard Class & Emergency Action]	Emergency Information:	Emergency Response Plan:	Secondary Containment
N/A	N/A	N/A	N/A	N/A	N/A	N/A

N/A

**Packaging** Store in original container, tightly closed, away from foodstuffs.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters:** No value assigned for this specific material by Workplace Exposure Standards. However, ethylene glycol (mist and vapour) levels should not exceed 50 ppm (127 mg/m<sup>3</sup>) at any time. No biological limit allocated.

**Appropriate engineering controls:** Use in well ventilated areas. Keep containers closed when not in use.

**Individual protection measures, such as Personal Protective Equipment (PPE):**

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

Observe good standards of hygiene and cleanliness. Always wash hands before smoking, eating, drinking, or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

**Respiratory Protection:** A respirator is not needed under normal and intended conditions of product use however if ventilation is not adequate then a suitable may be required.

**Eye and Face protection:** Safety glasses/goggles with side shield protection must be worn as a general precaution.

**Skin Protection:** Impervious gloves must be worn as a general precaution. Always check with the glove manufacturer or your personal protective equipment supplier regarding the correct type of glove to use.

Trousers, long sleeved shirt, or overalls and closed in shoes or safety footwear must also be worn as a general precaution.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Liquid

<b>Colour:</b>	Beige
<b>Odour:</b>	Slight ammonia
<b>pH (10% Solution):</b>	6.8 – 7.2
<b>Specific Gravity:</b>	1.25 – 1.35
<b>Melting Point/Freezing Point:</b>	Not applicable
<b>Boiling Point/range:</b>	No data available
<b>Flash Point:</b>	No data available
<b>Evaporation Point:</b>	No data available
<b>Vapour Pressure:</b>	No data available
<b>Vapour Density:</b>	No data available
<b>Solubility:</b>	No data available
<b>Partition coefficient: n- octanol/water</b>	No data available
<b>Auto-ignition Temperature:</b>	No data available
<b>Decomposition Temperature:</b>	No data available
<b>Viscosity:</b>	No data available
<b>Explosive Properties:</b>	No data available
<b>Oxidising Properties:</b>	No data available

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	Non-reactive under normal conditions.
<b>Chemical stability:</b>	Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
<b>Possibility of hazardous reactions:</b>	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid:</b>	None known.
<b>Incompatible materials:</b>	No incompatibilities.
<b>Hazardous decomposition products:</b>	No hazardous decomposition products if stored and handled as prescribed / indicated.

## 11. TOXICOLOGICAL INFORMATION

<b>Acute toxicity:</b>	No toxicity data for this specific product, however toxicity data for the hazardous ingredient is listed below.
<b>Ingestion:</b>	Harmful if swallowed. Repeated exposure can cause organ damage, specifically to kidneys.
<b>Inhalation:</b>	Available information indicates that it is not considered an inhalation risk.
<b>Skin:</b>	Not considered a skin irritant.
<b>Eye:</b>	Irritant: causes serious eye irritation.
<b>Respiratory or skin sensitisation:</b>	Not considered as a skin/respiratory sensitiser.
<b>Germ cell mutagenicity:</b>	Not suspected to cause genetic defects.
<b>Carcinogenicity:</b>	Not considered to be carcinogenic.
<b>Reproductive toxicity:</b>	Not considered to be toxic to reproduction.
<b>STOT-single exposure:</b>	Not expected to cause toxicity to specific target organ from a single exposure.
<b>STOT-repeated exposure:</b>	May cause damage to kidneys through prolonged or repeated exposure if swallowed
<b>Aspiration hazard:</b>	Not expected to be an aspiration hazard.
<b>Other information:</b>	

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	Do not discharge product into the environment without control.
	<b>Information on ammonium nitrate technical grade active constituent:</b>
<b>Fish:</b>	LC50 (48 hours) = 447 mg/L
<b>Aquatic invertebrates:</b>	EC50 (48 hours) = 490 mg/L

Aquatic plants:	EC50 (10 days) = 1700 mg/L
<b>Persistence/degradability:</b>	Multi-N 33 is not readily biodegradable. No additional information available
<b>Bioaccumulative potential:</b>	No additional information available
<b>Mobility in Soil:</b>	No additional information available
<b>Limiting exposure to ecotoxic substance through the setting of EEL values</b>	No information available

### 13. DISPOSAL CONSIDERATIONS

<b>Disposal methods:</b>	<p><b>Container disposal:</b> Triple rinse containers before disposal. Add rinsings to spray tank. DO NOT reuse this container for any other purpose. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and deliver to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with current version of the New Zealand Standard for the management of Agrichemicals New Zealand 8409. Do not burn empty containers or product..</p> <p><b>Product disposal:</b> Do not dispose of undiluted chemicals on site. Dispose of this product only by using according to the label, or at an approved landfill. DO NOT contaminate water supply with chemical or empty container.</p>
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### 14. TRANSPORT INFORMATION

<b>Road and Rail Transport:</b>	Not applicable
<b>Marine Transport:</b>	Not applicable
<b>Air Transport:</b>	Not applicable
<b>Public Transport</b>	DO NOT carry more than 1 Kg of this product on a passenger service vehicle.

### 15. REGULATORY INFORMATION

<b>HSNO approval NO.</b>	HSR 002571
<b>HSNO controls:</b>	See <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> for controls
<b>Approved Handlers certificate is required:</b>	Not required
<b>ACVM:</b>	Not applicable
<b>ACVM controls:</b>	Not applicable

### 16. OTHER INFORMATION

<b>General Information:</b>	This product is a registered agricultural chemical and must therefore be used in accordance with the container label directions.
<b>Issue Number:</b>	001
<b>Issue Date:</b>	16 July 2020
<b>Literary Reference:</b>	None
<b>Key abbreviations or acronyms used:</b>	LD <sub>50</sub> or LC <sub>50</sub> – Estimated lethal dose / concentration to kill 50% of the population/sample. Code of Practice Preparation of Safety Data Sheets, HSNO CoP 8-1 09-06 (September 2006) STOT – Specific Target Organ Toxicity

*This Material Safety Data Sheet 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 should read this MSDS and consider the information*

*in the context of how the product will be handled and used in the workplace including in conjunction with other products. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the manufacturer be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the manufacturer has been advised of the possibility of such damages.*