

# SAFETY DATA SHEET

## *ARM U 16% DMPP*


SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION	
PRODUCT IDENTIFIER	<b>ARM U 16% DMPP</b>
PRODUCT USE	Liquid nitrogen stabilizer for urea fertilizers
MANUFACTURERS NAME	Active Agriscience Australia Pty Ltd.
DATE	June 12 2025
EMERGENCY TELEPHONE	+1800 039 008
PREPARED BY	Active Agriscience Australia Pty Ltd.
USE RESTRICTIONS	For professional use only. Use only as labeled.
DISTRIBUTORS NAME	
STREET ADDRESS	
CITY	
POSTAL CODE	
COUNTRY	
EMERGENCY TELEPHONE	

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### SECTION 2 – HAZARDS IDENTIFICATION

#### GHS CLASSIFICATION

WHS Regulations	<p><b>Eye Damage / Irritation:</b> Category 1  <b>Skin Corrosion / Irritation:</b> Category 2  <b>Specific Target Organ Toxicity (STOT); Single exposure:</b> Category 3 (respiratory irritation)  <b>Specific Target Organ Toxicity (STOT); Single exposure:</b> Category 2 (kidneys)  <b>Reproductive toxicity:</b> Category 1B</p>
 <p><b>DANGER</b></p>	<p><b>HAZARD STATEMENTS:</b> CAUSES SERIOUS EYE DAMAGE. CAUSES SKIN IRRITATION. MAY CAUSE RESPIRATORY IRRITATION. MAY DAMAGE FERTILITY OR THE UNBORN CHILD.</p> <p><b>PRECAUTIONARY STATEMENTS:</b> Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear chemical resistant gloves, coveralls, goggles and face protection. Change gloves frequently. Wear air supplied respirator where airborne concentrations exceed recommended exposure limits or are unknown. Do not eat, drink or smoke when using this product. Wash up thoroughly before eating, drinking, smoking and leaving work. Keep livestock off treated areas until after 14 days or 2.5 cm of rainfall has accumulated.</p> <p><b>FIRST AID:</b> <i>IF SWALLOWED:</i> Rinse mouth. Do NOT induce vomiting. <b>Immediately call a POISON CENTRE / doctor.</b> <i>IF ON SKIN:</i> Immediately take off all contaminated clothing. Rinse skin with water (or shower). Wash contaminated clothing before reuse. <b>Seek immediate medical attention.</b> <i>IF INHALED:</i> Remove person to fresh air and keep comfortable for breathing. <b>Immediately call a POISON CENTRE / doctor.</b> <i>IF IN EYES:</i> Immediately flush eyes with a gentle stream of water for 15 minutes while holding the upper and lower eyelids open. Remove contact lenses, if present and easy to do. <b>Seek immediate medical attention.</b></p> <p><b>STORAGE:</b> KEEP OUT OF REACH OF CHILDREN. Store locked up in a cool, dry, well-ventilated area away from food or feed storage. DO NOT FREEZE.</p> <p><b>DISPOSAL:</b> Dispose of this product and its container in accordance with Federal, Provincial, and Local regulations.</p>

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#### SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS	CAS#	CONCENTRATION
Propylene glycol	57-55-6	15-30%
N-methyl-2-pyrrolidone	872-50-4	30-45%
3,4-Dimethylpyrazole Phosphate (DMPP)	202842-98-6	12-18%

#### SECTION 4 – FIRST AID MEASURES

EYE CONTACT	Immediately flush eyes with a gentle stream of water for 15 minutes while holding the upper and lower eyelids open. Remove contact lenses, if present and easy to do. <b>Seek immediate medical attention.</b>
SKIN CONTACT	Immediately take off all contaminated clothing. Rinse skin with water (or shower). Wash contaminated clothing before reuse. <b>Seek immediate medical attention.</b>
INHALATION	Remove person to fresh air and keep comfortable for breathing. <b>Immediately call a POISON CENTRE / doctor.</b>
INGESTION	Rinse mouth. Do NOT induce vomiting. <b>Immediately call a POISON CENTRE/doctor.</b>
<b>Most Important Symptoms, both acute &amp; delayed</b>	Causes serious eye damage. Causes skin irritation. May cause respiratory irritation. May damage fertility or the unborn child.

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### SECTION 5 – FIRE FIGHTING MEASURES

<b>FLAMMABLE</b>	Product will not burn or support combustion.
<b>MEANS OF EXTINCTION</b>	Use extinguishing methods appropriate for the surrounding fire.
<b>FLASHPOINT &amp; METHOD</b>	NAP
<b>UPPER FLAMMABLE LIMIT</b>	NAP
<b>LOWER FLAMMABILITY LIMIT</b>	NAP
<b>AUTO IGNITION TEMPERATURE</b>	NAP
<b>SENSITIVITY TO IMPACT</b>	NAP
<b>SENSITIVITY TO STATIC DISCHARGE</b>	NAP
<b>HAZARDOUS COMBUSTION PRODUCTS</b>	Toxic irritating and/or corrosive gases may be released during a fire: carbon oxides, nitrogen oxides, sulphur oxides.

### SECTION 6 – ACCIDENTAL RELEASE MEASURES

<b>LEAK &amp; SPILL PROCEDURES</b>	Wear personal protective equipment outlined in SECTION 8. Ventilate area of spill. Avoid breathing mists. Contain spill then adsorb with inert material and place into suitable clean containers for later disposal. Do not release into drains or the environment.
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### SECTION 7 – HANDLING AND STORAGE

<b>HANDLING</b>	Do not handle until all safety precautions have been read and understood. Do not breathe mist/spray. Do not get in eyes, or skin. Wear personal protective equipment outlined in SECTION 8. Wash hands and other exposed areas before eating, drinking, smoking and when leaving work.
<b>STORAGE</b>	KEEP OUT OF REACH OF CHILDREN. Store locked up in a cool, dry, well-ventilated area away from food or feed storage. DO NOT FREEZE.

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### SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

#### EXPOSURE STANDARDS

INGREDIENT	REFERENCE
1-Methyl-2-pyrrolidone	SWA [AUS] TWA: 25 ppm, 103 mg/m <sup>3</sup> , STEL: 75 ppm, 309 mg/m <sup>3</sup>
1-Methyl-2-pyrrolidone	SWA [Proposed] TWA: 20 ppm, 80 mg/m <sup>3</sup>
Propane-1,2-diol (particulates only)	SWA [AUS] TWA: -- ppm, 10 mg/m <sup>3</sup>
Propane-1,2-diol (total vapour & particulates)	SWA [AUS] TWA: 150 ppm, 474 mg/m <sup>3</sup>
Propane-1,2-diol (total vapour & particulates)	SWA [Proposed] TWA: -- ppm, 50 mg/m <sup>3</sup>

#### BIOLOGICAL LIMITS

INGREDIENT	REFERENCE
1-Methyl-2-pyrrolidone	Determinant: 5-hydroxy-N-methyl-2-pyrrolidone in urine Sampling Time: End of shift BEI: 100 mg/L
ENGINEERING CONTROLS	Avoid inhalation. Use in well-ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

#### PERSONAL PROTECTIVE EQUIPMENT

Skin	Wear chemical resistant gloves, coveralls and face protection when handling or applying this product. Change gloves frequently.
Eyes	Wear chemical resistant goggles when handling or applying this product.
Respirator	Wear air supplied respirator where airborne concentrations exceed recommended exposure limits or are unknown.

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### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Liquid
COLOUR	Blue
BOILING POINT	NAV
EVAPORATION RATE	NAV
ODOUR	NAV
SOLUBILITY IN WATER	Miscible in water
APPEARANCE	Blue liquid
VISCOSITY	38 cPs at 10°C
FREEZING POINT	NAV
SPECIFIC GRAVITY	1.05 - 1.1 g/cm <sup>3</sup>
pH	4 - 6
ODOUR THRESHHOLD	NAV

### SECTION 10 – STABILITY AND REACTIVITY

CHEMICAL STABILITY	Stable under normal conditions of use and storage.
INCOMPATIBLE WITH OTHER SUBSTANCES	Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), reducing agents (e.g. sulphites), heat and ignition sources.
HAZARDOUS DECOMPOSING PRODUCTS	May evolve toxic gases (carbon/ nitrogen/ sulphur oxides, hydrocarbons) when heated to decomposition.

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SECTION 11 – TOXICOLOGICAL INFORMATION	
ACUTE TOXICITY	<p>Animal evidence indicates that 1-methyl-pyrrolidone exhibits low acute oral, dermal or inhalation toxicity.</p> <p><b>1-Methyl-2-pyrrolidone</b></p> <ul style="list-style-type: none"> <li>• Oral LD50: 4,150 mg/kg (rat)</li> <li>• Dermal LD50: &gt; 5,000 mg/kg (rat)</li> <li>• Inhalation LC50: &gt; 5.1 mg/l/4hrs (rat)</li> </ul> <p><b>Propylene Glycol (Propane-1,2-diol)</b></p> <ul style="list-style-type: none"> <li>• Oral LD50: &gt; 2080 mg/kg (quail)</li> </ul> <p>Dermal LD50: 20800 mg/kg (rabbit)</p>
CHRONIC TOXICITY	Based on the available information, product does not meet criteria for chronic toxicity.
EYE / SKIN IRRITATION	Causes serious eye damage and skin irritation.
SENSITIZATION	Not available.
CARCINOGENICITY	No ingredients present at or above 0.1% are classified as carcinogenic under the GHS as adopted in the Australian WHS Regulations.
REPRODUCTIVE TOXICITY	May damage fertility or unborn child.
MUTAGENICITY	Not available.
Possible delayed effects	N-methyl-2-pyrrolidone: effects may be delayed. Animal studies show adverse effects to liver and kidneys.

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SECTION 12 – ECOLOGICAL INFORMATION	
ECO TOXICITY	Aquatic Toxicity
<b><i>N-methyl-2-pyrrolidone (CAS 872-50-4)</i></b>	
Acute Toxicity	Crustacea
	Algae
	Crustacea
	Fish
Test	LC <sub>50</sub>
	EC <sub>50</sub>
	EC <sub>50</sub>
	LC <sub>50</sub>
Species	Palaemonetes vulgaris
	Scenedesmus subspicatus
	Daphnia magna
	Oncorhynchus mykiss
Test Results	1107 mg/l, 96 hours
	> 500 mg/l, 72 hours
	> 1000 mg/l, 24 hours
	> 500 mg/l, 96 hours
Chronic Toxicity	Crustacea
Test	LC <sub>50</sub>
Species	Daphnia magna
Test Results	25 mg/l, 21 days
<b><i>Propylene Glycol (CAS 57-55-6)</i></b>	
Acute Toxicity	Crustacea
Test	LC <sub>50</sub>
Species	Ceriodaphnia
Test Results	18340 mg/l, 48 hours
Persistence and Degradability	This product is not readily biodegradable.
Bioaccumulation potential	Not available.
<b><i>Partition coefficient n-octanol / water (log Kow)</i></b>	
N-methyl-2-pyrrolidone (CAS 872-50-4)	-0.54
Propylene Glycol (CAS 57-55-6)	-0.92
Mobility in soil	Product is water soluble and may move through soil.



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### SECTION 13 – DISPOSAL CONSIDERATIONS

#### WASTE DISPOSAL

Dispose of this product and its container in accordance with Federal, Provincial, and Local regulations. Do not allow this product to enter drains or drinking water sources.

### SECTION 14 – TRANSPORT INFORMATION

#### SHIPPING

ADG: Not a dangerous good for transport.

### SECTION 15 – REGULATORY INFORMATION

This SDS has been prepared in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), as adopted under the Work Health and Safety (WHS) Regulations in Australia (GHS Revision 7).

### SECTION 16 – OTHER INFORMATION

To the best of our knowledge, the information contained herein is current and correct as of the date of this SDS, however, the information and recommendations are presented without warranty, representation or license of any kind, with respect to their accuracy, or completeness, and the seller, supplier and manufacturer (Supplier) of this material or their affiliates, disclaim all liability for reliance on such information and recommendations.

Final determination of the suitability of any material is the sole responsibility of the buyer or the user (recipient). All materials may present unknown hazards and should be used with caution. The recipient assumes all risk in connection with the use of this material and assumes all responsibility for ensuring the material is used in a safe manner in compliance with applicable environmental, health and safety laws.

The supplier does not warrant the merchantability of this material or the fitness of the material for any particular use and assumes no responsibility for injury or damage caused directly or indirectly by the use of this material.