

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1. Product Identifier

Product Name: UNISZON

Synonyms: MAP+1% Zinc ♦ 12-21-0-4.5-Zn1 ♦ monobasic ammonium phosphate ♦ ammonium dihydrogen phosphate ♦ ammonium phosphate monobasic ♦ granular MAP ♦ fertilizer grade ammonium phosphate

1.2. Uses and uses advised against

Uses: CROP NUTRIENT ♦ FERTILIZER

Uses advised against: -

1.3. Details of the supplier of the product

Supplier Name: FERTIGLOBE AUSTRALIA PTY LTD

Address: Level 1, 250 Ingles Street, Port Melbourne, VIC, 3207, AUSTRALIA

Telephone: 1300 936 438

Fax: +61 (0) 3 9999 8701

Email: info@fertiglobe.com.au

Website: www.fertiglobe.com

1.4. Emergency telephone numbers

Emergency: +61 (0) 424 837 788

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

GHS classifications: Aquatic Toxicity (Chronic): Category 3

2.2. GHS LABEL ELEMENTS

Signal Word

None allocated

Pictograms

None allocated

Hazard Statements

H412 Harmful to aquatic life with long lasting effects.

Disposal statements

P501 Dispose of contents/container in accordance with relevant regulations.

Storage statements

None allocated.

Response statements

None allocated.

Prevention

P273 Avoid release to the environment.

2.3. Other hazards

Slippery when wet.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
MONO-AMMONIUM PHOSPHATE (MAP)	7722-76-1	231-764-5	>90%
SULPHUR	7704-349	231-722-6	>4%
ZINC	7440-66-6	231-175-3	<1%

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 for at least 15 minutes or until advised by a doctor or the Poisons Information Centre.
- Inhalation** If inhaled, remove persons from contaminated area into fresh air.
- Skin** If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If irritation develops and persists after washing, seek medical attention.
- Ingestion** Do not induce vomiting. 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

Effects of overexposure may include irritation of the nose, throat and digestive tract, nausea, vomiting, diarrhea, coughing and shortness of breath. See Section 11 for more detailed information on health effects and symptoms.

4.3. Immediate medical attention and special treatment needed

Treat symptomatically. If person has been exposed to concentrated decomposition products, watch for delayed symptoms of pulmonary oedema.

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

May evolve phosphorus and/or sulphur oxides when heated to decomposition.

5.3. Advice for firefighters

No fire or explosion hazard exists. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use water-fog to cool intact containers and nearby storage areas.

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. Ventilate area where possible.

6.2. Environmental precautions

Prevent spilled product from entering drains or waterways.

6.3. Methods of cleaning up

Recover spilt fertiliser as soon as possible. If in a warehouse and the product has not been contaminated or degraded, return it to the original stockpile. Otherwise, store in a separate bay or containers. If in the open, and the product cannot be immediately recovered, take steps to protect the product from the elements and loss to waterways. Cover the spilt

product with a water-proof tarpaulin, weighed down to prevent it being blown off by wind. In agricultural fields, spread any residual fertiliser out over as wide an area as possible. If left too thick, plant growth may be affected or die. Remove from roadways by sweeping / street sweeper.

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 contact with eyes or skin 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

Fertilisers should be stored in a cool, dry, covered and well-ventilated area. Bulk fertiliser should be stored in bays or piles, on concrete floors and physically apart from other products. If stored in the open, do so for only for short periods keeping the bags covered with a tarpaulin. Fertilisers should not be stored in silos. Do not allow product to come into contact with water from any source including rain, condensation or from the surface on which it is stored. Store fertiliser away from acids, oxidising agents (e.g. hypochlorite), other farm chemicals, insecticides, fungicides, herbicides, grains or foodstuffs. Fertiliser may set in storage, posing a risk of a 'hang up' and engulfment when being removed from a stockpile. Bagged fertilisers should be stored under cover and out of direct sunlight as UV light will degrade woven polypropylene bags. Do not store 1,000 kg bulk bags more than 2 high as this promotes caking. Stockpiles of fertiliser in bags must be stable. Place the bags as close as is reasonably practicable to each other, without causing damage. If stored on pallets, observe and do not exceed the pallet capacity rating. When walking near rows of stacked bags, pedestrians should maintain a distance equal to at least the height of the stacked product. Fertiliser can emit ammonia or other odours. When stored in confined, unventilated spaces, (e.g.: the hold of a ship), oxygen may become depleted. In this situation, ventilate and test atmosphere prior to entry.

7.3. Specific end uses

Fertiliser – apply at rate as advised by an agronomist

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Exposure standards

No exposure standards have been entered for this product.

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.

Use appropriate safe working procedures to reduce the potential for an inhalation hazard.

PPE

Eye / Face

Wear dust-proof goggles.

Hands

Wear PVC or rubber gloves.

Body

When using large quantities, or where heavy contamination is likely, wear coveralls.

Respiratory

At high dust levels, wear a Class P1 (Particulate) respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	SOLID, 4-6MM, BROWN, GREY OR BLACK GRANULES
Odour	SLIGHT ACIDIC ODOUR
Flammability	NON-FLAMMABLE
Flash point	NOT APPLICABLE
Boiling point	NOT APPLICABLE
Melting point	NOT APPLICABLE
Evaporation rate	NOT APPLICABLE
pH	4.2 TO 5.2 (1% SOLUTION)
Vapour density	NOT APPLICABLE
Specific gravity	NOT APPLICABLE
Solubility (water)	80% - 90%
Vapour pressure	NOT APPLICABLE
Upper explosion limit	NOT APPLICABLE
Lower explosion limit	NOT APPLICABLE
Partition coefficient	NOT APPLICABLE
Autoignition temperature	NOT APPLICABLE
Decomposition temperature	190°C (374°F)
Viscosity	NOT APPLICABLE
Explosive properties	NOT EXPLOSIVE
Oxidising properties	MAY BE CORROSIVE TO IRON, MILD STEEL, ALUMINIUM, ZINC, COPPER
Odour threshold	NOT AVAILABLE

10. STABILITY AND REACTIVITY

10.1. Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

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.

Avoid moisture / water.

10.5. Incompatible materials

Incompatible with alkaline materials, oxidising agents (e.g. hypochlorite) or acids (e.g. nitric acid).

10.6. Hazardous decomposition products

May evolve oxides of phosphorus and nitrogen when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity This product is expected to be of low toxicity. Based on available data, the classification criteria are not met.

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
SULPHUR	>5,000 mg/kg (rat)	> 2,000 mg/kg (rabbit)	1,660 mg/m ³ (mammal)
ZINC	>5,000 mg/kg (mouse)		>5.41 mg/L (rat)
MONO-AMMONIUM PHOSPHATE	>1,000 mg/kg (rat)	>5,000 mg/kg (rat)	

Skin

Not classified as a skin irritant.

Prolonged or repeated contact may result in mild irritation.

Eye	Not classified as an eye irritant. Contact may result in mild irritation, lacrimation and redness.
Sensitisation	Not classified as causing skin or respiratory sensitisation.
Aspiration	Not classified as causing aspiration.
Reproductive	Not classified as a reproductive toxin.
Carcinogenicity	Not classified as a carcinogen.
Mutagenicity	Not classified as a mutagen.
STOT – Single	Not classified as causing organ damage from single exposure. However, over exposure may result in irritation of the nose and throat, with coughing.
STOT - Repeated	Not classified as causing organ damage from repeated exposure.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Harmful to aquatic life with long lasting effects. May release ammonium ions that are toxic to fish. Non-ionized ammonia concentrations above 0.02 mg/l are considered toxic in fresh water.

12.2. Persistence and degradability

Expected to be inherently biodegradable

12.3. Bio-accumulative potential

No information provided

12.4. Mobility in soil

Expected to remain in water or migrate through soil

12.5. Other adverse effects

MAP is considered biodegradable and is taken up as a nutrient by vegetation. Large spills can harm or kill vegetation. In waterways, may release phosphates which will result in algae growth, increased turbidity, and depleted oxygen. At extremely high concentrations, this may be hazardous to fish or other marine organisms. Release to watercourses may cause effects downstream.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste disposal Collect without generating dust. Place in clean, sealed containers and dispose of to an approved landfill 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 TANSPORT IMDG/IMO)	AIR TANSPORT (IATA)
14.1. <u>UN Number</u>	None allocated	None allocated	None allocated
14.2. <u>Proper Shipping Name</u>	None allocated	None allocated	None allocated
14.3. <u>Transport Class</u>	None allocated	None allocated	None allocated
14.4. <u>Packing Group</u>	None allocated	None allocated	None allocated

14.5. Environmental hazards

At extremely high concentrations, this may be hazardous to fish or other marine organisms. Release to watercourses may cause effects downstream.

14.6. Special precautions for user

Hazchem code none allocated

15. REGULATORY INFORMATION

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

Poisons 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. The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)].	
Hazard codes	N	Dangerous for the environment
Risk phrases	R53	May cause long-term adverse effects in the aquatic environment
Safety phrases	S24	Avoid contact with skin
	S25	Avoid contact with eyes
	S29	Do not empty into drains
	S61	Avoid release to the environment. Refer to special instructions/safety data sheets.
Inventory listings	AUSTRALIA: AICS (Australian Inventory of Chemical Substances) All components are listed on AICS or are exempt.	

16. OTHER INFORMATION

Additional information	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: Effects of overexposure to dusts can include irritation of the eyes and respiratory tract, pneumoconiosis (dust congested lungs), pneumonitis (lung inflammation), coughing, vomiting, diarrhea, abdominal pain and jaundice. 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 Fertiglobe Australia on information concerning the product which has been provided by the manufacturer 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 Fertiglobe Australia. While all due care has been taken to include accurate and up-to-date information in this Safety Data Sheet, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Fertiglobe Australia 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.

END OF SDS