



SAFETY DATA SHEET

MAP & MANGANESE

Identification of the Material & Supplier

Product Name: MAPMN
Other Names: MAPMN, Monobasic Ammonium Phosphate, MAPMN 11-52, Mn 4%
Recommended Use: Fertilizer
Supplier: Summit Fertilizers
29 Ocean St
Kwinana Beach WA 6167
Telephone: 9439 8999

Hazards Identification

Hazards Classification: MAPMN is not classified as hazardous according to Safe Work Australia criteria
Risk Phrase: MAPMN is not classified as a Dangerous Good according to the ADG Code

Composition/Information on Ingredients

Chemical Identity: Mono ammonium Phosphate $\text{NH}_4\text{H}_2\text{PO}_4$ + MNSO_4
Proportion of Ingredients:
N 10.4%
P 21.5%
Mn 4.0%
S 11%
CAS Number: 7722-76-1
7785-87-7

First Aid Measures

Eye Contact: Immediately flush with fresh water for at least 15 minutes. Hold eyes open while flushing with water. Seek medical attention if irritation persists.
Skin Contact: Immediately remove contaminated clothing and shoes. Flush skin with fresh water for at least 15 minutes. Use soap if available or follow by flushing with soap and water. Do not reuse contaminated clothing without laundering. Seek medical attention if irritation persists.
Inhalation: Remove victim to fresh air. If breathing is difficult, give oxygen. If not breathing, administer artificial respiration. Seek medical attention immediately.
Ingestion: If victim is conscious and alert, give 2 to 4 cups of water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. Seek medical attention immediately.

Fire Fighting Measures

Flammability: MAPMN is non flammable and does not support combustion.
Suitable Extinguishing Media: Small fires: water spray, foam, dry chemical or CO_2
Large fires: water spray, fog or foam
Hazards from Combustion Products: Ammonia fumes may be released. Wear self-contained breathing apparatus with full protective clothing.
Hazchem Code: None allocated.



Accidental Release Measures

Emergency Procedures	Isolate the area and deny entry to nonessential personnel. Emergency responders and/or clean up personnel should wear appropriate protective clothing and equipment.
Methods and Materials for Containment & Cleanup	Prevent from entering drains or waterways. Collect material promptly. Minimise dust generation during clean up operation.

Handling & Storage

Precautions for Safe Handling	None listed
Conditions for Safe Storage	Store in a cool, dry, well ventilated location. Prevent product from getting wet as it will cause caking and handling problems.
Storage Incompatibilities	

Exposure Controls/Personal Protection

National Exposure Controls	No specific official limit. ACGIH recommended value for inhalable particulate TLV/TWA: 10mg/m ³
Engineering Controls	Use in well ventilated areas. Avoid dusty areas.
Personal Protective Equipment	Wear gloves, long sleeve shirt and long trousers to prevent skin contact. In dusty areas use a P2 respirator and wear chemical safety glasses to prevent eye contact.

Physical & Chemical Properties

Appearance	Brown or grey granulated solid material.
Odour	Slight odour.
pH of 10% Solution	4.2
Vapour Pressure	Approximately zero
Boiling Point	>210C decomposes
Melting Point	190C
Solubility	276g/l in water at 20°C
Specific Gravity	1.82
Bulk Density	0.9-1.0t/m ³

Stability & Reactivity

Stability	Stable under normal temperatures and pressures
Reactivity	Ammonia is released upon reaction with strong bases.
Incompatible Materials	Incompatible with alkalis, sodium hypochlorite, strong acids, copper and its alloys.
Decomposition Products	Extreme temperatures such as fire causes formation of toxic fumes of PO _x and NH ₃ .

Toxicological Information

Health Effects	Low toxicity. If handled according to instructions there is no danger to humans. There is no known effect from chronic exposure to MAPMN. Inhalation of dust may cause irritation to the nose and upper respiratory tract. Prolonged skin contact may cause some irritation, including redness and itching. Eye contact may cause irritation, redness and pain. Ingestion of large amounts may give rise to gastro-intestinal irritation with symptoms such as nausea, vomiting, diarrhea.
Toxicity Data	LD50 (ingestion): >2,000mg/kg (rat) LD50 (dermal): >5,000mg/kg (rat)



Ecological Information

Ecotoxicity

Aquatic: Low toxicity to aquatic life.

Fish 96 hour LC₅₀, OECD Guidelines 203 (rainbow trout): >86 mg/L

Non toxic to aquatic organisms as defined by USEPA.

Mobility

May leach into groundwater if released to soil. Will not evaporate readily.

Persistence & Degradability

Phosphates are converted to calcium or iron/aluminium phosphates or are incorporated into the organic soil matter.

Bioaccumulative Potential

Does not show bio-accumulation phenomena.

Disposal Considerations

Disposal Methods & Containers

Dispose of on a farm, or authorized waste facility in accordance with statutory requirements.

Transport Information

UN Number

None allocated

UN Proper Shipping Name

None allocated

Class & Subsidiary Risk

None allocated

Packing Group

None allocated

Hazchem Code

None allocated

Regulatory Information

Australian Regulatory Information

A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

Other Information

Key/Legend

NOHSC	National Occupational Health and Safety Commission
USEPA	United States Environmental Protection Authority
SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons
ACGIH	American Conference of Government Industrial Hygienists
OECD	Organisation for Economic Cooperation and Development
ES-TWA	Exposure Standard – Time weighted average
ES-STEL	Exposure Standard – Short term exposure level
ES-Peak	Exposure Standard – Peak level
LDLo	The lowest dose in an animal study in which lethality occurred.
LD50	Lethal dose 50. The single dose of a substance that causes death of 50% of an animal population from exposure other than inhalation
t/m ³	Tonnes per cubic metre
mg/m ³	Milligrams per cubic metre
mg/kg	Milligrams per kilogram
pH	Hydrogen ion concentration on a scale of 0-14

Disclaimer

The information contained in this SDS is offered in good faith as accurate but does not purport to be all-inclusive. Health and safety precautions in this SDS may not be adequate for all individuals and/or situations. It is the user's responsibility to determine the suitability of any material for a specific purpose, adopt such precautions as may be necessary and comply with all applicable laws and regulations.

Summit Fertilizers reserves the right to make changes to SDS data without notice.