SAFETY DATA SHEET

MONO AMMONIUM PHOSPHATE

Identification of the Material & Supplier

Product Name:	Mono ammonium Phosphate
Other Names:	MAP, Monobasic Ammonium Phosphate, MAP 10-50-0
Recommended Use:	Fertilizer
Supplier:	Summit Fertilizers 29 Ocean St Kwinana Beach WA 6167 Telephone: 9439 8999

Hazards Identification

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

Composition/Information on Ingredients

Chemical Identity	Mono ammonium Phosphate $NH_4H_2PO_4$
Proportion of Ingredients	Phosphate as P 19.1% Nitrogen as N 17.5%
CAS Number	7722-76-1

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	MAP 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 alkalies, 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 MAP. 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 LC_{50} , 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.