# MATERIAL SAFETY DATA SHEET

# PRODUCT: HYDRANGEA BLUEING FERTILISER

**Date of Issue:** 30 SEPT 2025 **Valid until:** 29 SEPT 2030 **GHS** Format

## 1. IDENTIFICATION OF MATERIAL & SUPPLIER

**Product (material) Name:** Manutec Hydrangea Blueing Fertiliser Soluble
**Other names:** None
**Manufacturer's code**: MTO5010 (500G), MTO6010(600G)
**Recommended use:** as a water soluble fertilsier to supply all essential nutrients for growth and flowering of Blue Hydrangeas.

**Manufacturer/Supplier Information:**

**Name:** MANUTEC PTY LTD
**Address:** 30 Jonal drive, Cavan, South Australia 5094
**Telephone No:**+61-8-8260 2277 **Fax**:+61-8-8260 2399
**Email:** manutec@manutec.com.au

**Emergency contact only:** Poisons Information Centre (Australia) 131126

## 2. HAZARDS IDENTIFICATION

Poisons Schedule: None classified

**Hazard Classification:**

**Part 1 - Fertiliser :** NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Part 2 – Aluminium Sulphate: HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

**Hazard Categories:**
Part 1 - None specified
Part 2 - Skin Corrosion/Irritation Category 2, Serious Eye Damage Category 1, STOT - SE (Resp. Irr.) Category 3

**Pictograms:**
**Part 1 -** None specified
Part 2 -

**Signal Word:** None specified

**Hazard Statements:**
Part 1 – None specified
Part 2 - H315 Causes skin irritation
H318 Causes serious eye damage
H335 May cause respiratory irritation

**Precautionary Statements:**
Part 1 – None specified
Part 2
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor/physician/first aider
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

**National Transport Commission (Australia)**

**Dangerous Goods Classification**

NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Entity | CAS Number | Proportion |
|---|---|---|
| **Part 1 - Fertiliser** | | |
| Proprietary formulation of various non hazardous ingredients in souble form (Major Ingredients are Urea (CAS NO 57-13-6), Potassium Nitrate (CAS NO 7757-79-1 and Mono Potassium Phosphate (CAS NO 7778-77-0) | | 100% |
| **Part 2 – Aluminium Sulphate** | **CAS No 10043-01-3** | **100%** |

## 4. FIRST AID MEASURES – Part 1 – Fertiliser mix

If poisoning occurs, please contact immediately Poisons Information Centre (Australia) on 131126

**Ingestion**: Rinse mouth with water. If swallowed, donot induce vomiting. Give a glass of water to drink, but never give anything by mouth to unconcieuus person. If vomiting occurs give additonal water. Seek medical advice immediately.

**Eye**: Flush with flowing water for 10-15 minutes. If irritation persists, seek immdediate medical advice.

**Skin**: Remove contaminated clothing. Wash affected part with soap and clean water. Any symptoms such as swelling, redness, blister or irritation occurs, seek immediate medical attention.

| | |
|---|---|
| **Inhaled**: | Remove victim to fresh air. Remove contaminated clothing and make victim comfortable postion. Seek mediacl help if victim still uncomfotable and develop any symptoms. |
| **Aid Facilities**: | Poisons Information Centres in each State capital city may provide additional assistance (Ph 131126). |
| **Advice to doctor**: | No special advice, treat symptomatically. |

## 4. FIRST AID MEASURES – Part 2 – Aluminium Sulphate

**Eye Contact**
If this product comes in contact with the eyes:
Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

**Skin Contact**
If skin contact occurs:
Immediately remove all contaminated clothing, including footwear.
Flush skin and hair with running water (and soap if available).
Seek medical attention in event of irritation.

**Inhalation**
If dust is inhaled, remove from contaminated area.
Encourage patient to blow nose to ensure clear passage of breathing.
If irritation or discomfort persists seek medical attention.

**Ingestion**
If swallowed do NOT induce vomiting.
If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice

## 5. FIRE FIGHTING MEASURES – PART 1 – Fertiliser mix

**Hazchem code:** Not applicable
**Extinguishing media:**
Material is non-combustible, however if cuaght in fire use Water spray/fog, foam, dry agent (carbon dioxide/dry chemcial powder)
**Special protective equipment for firefighters:**
On decmoposition, may emit toxic fumes, so fire fighters to wear appropriate clothing and self contained breathing apparatus.

## 5. FIRE FIGHTING MEASURES – PART 2 – ALUMINIUM SULPHATE

**Extinguishing media**
There is no restriction on the type of extinguisher which may be used.
Use extinguishing media suitable for surrounding area.
Special hazards arising from the substrate or mixture

**Fire Incompatibility** May emit poisonous fumes.May emit corrosive fumes.
**Advice for firefighters**
Wear breathing apparatus plus protective gloves in the event of a fire.
Fire/Explosion Hazard - Non combustible.
Not considered a significant fire risk, however containers may burn.

## 6. ACCIDENTAL RELEASE MEASURES – FOR BOTH PART 1 & Part 2

**Small spills:** Ensure to wear appropriate protective gear (such as gloves/goggles) as appropriate and sweep to collect in to a rag or paper towel and dispose as general waste. Avoid contact with eye/skin
**Large spills:** Ensure to wear appropriate protective gear and sweep and collect in to properly labelled containers. Avoid material entering in to drianage or waterways. Advice or contact local council or environmental authority as appropriate.

## 7. HANDLING AND STORAGE - FOR BOTH PART 1 & Part 2

- Avoid Skin, eye contact and inhalation of dust.
- Store in a dry, cool and ventillated place away from Children, pets and exposure to direct sunlight. Also store away from any incompatible materials descibed in section 10 of this safety data sheet.
- When not in use and after use, ensure to keep the container/bag sealed securely.
- If any spillage, follow appropriate action as descibed in section 6 of this data sheet.
  Store in original packaging as approved by manufacturer

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION- FOR BOTH PART 1 & PART 2

**Engineering measures:**
Proper Ventillation in place, particualry while handling larger volumes in factory settings and use appropriate protective cloth
**Control of exposition limit:**
Respiratory protection: Keep ventilated and use mask during handling large volumes
Hand protection: Rubber or plastic gloves
Eye protection: Safety glasses
Skin protection: Use adequate clothing and overalls

**Personl Protection in Manufacturing/Packing area:**
Wear overalls, safety glasses and impermiable gloves. Avoid generating dust. If dust exists wear appropriate dust mask meeting requirements of AS/NZS 1715 Standards. Always wash hands after handling and before eating, smoking or drinking. Wash contamintaed clothing before storing or reuse
**Hygeinic and personal protection practices while handling the product**
Wear safety glasses and impermiable gloves and dust mask if required.
Keep the material/product away from food and drink, animal feed.
When using, do not eat,drink or smoke
Wash hands or affected area thoroughly prior to eating, drinking or smoking
Avoid contact with skin, eye and inhalation of any dust from the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES – Part 1- Fertiliser

| | |
|---|---|
| **Form**: | Crystalline powder |
| **Colour**: | Blue |
| **Odour**: | None |
| **Melting Point**: | Not applicable |
| **Boiling Point**: | Not applicable |
| **Vapour Press kPa 025C**: | Nil |
| **Specific Gravity**: | Not determined |
| **Flashpoint (C)**: | Non flammable |
| **Flammability Limits**: | Non flammable |
| **Solubility in water**: | Completely soluble in water |

## 9. PHYSICAL AND CHEMICAL PROPERTIES – Part 2- ALUM

| | |
|---|---|
| Form: | Crystalline powder |
| Colour: | White |
| Odour: | None |
| Melting Point: | 770oC |
| Boiling Point: | Not applicable |
| Vapour Press kPa 025C: | Nil |
| Specific Gravity: | Not determined |
| Flashpoint (C): | Non flammable |
| Flammability Limits: | Non flammable |
| Solubility in water: | Completely soluble in water |

## 10. STABILITY AND REACTIVITY- FOR BOTH PART 1 & Part 2

| | |
|---|---|
| **General Information** | Product is a non-flammable solid. |
| **Chemical Stability** | Product is stable under normal conditions of use, storage and temperature. |
| **Conditions to Avoid** | Avoid excessive heat, generating dust, direct sunlight, moisture and high temperatures. |
| **Materials to Avoid** | Incompatible with strong oxidising agents, bases, mineral acids. |

**Hazardous Decomposition Products**
Main combustion gas: sulfur oxides (SOx), metal oxides.
**Hazardous Polymerisation**
Hazardous Polymerisation has not been reported.

## 11. TOXICOLOGICAL INFORMATION – Part 1 – Fertiliser mix

In general when the product is used and handled safely and as per directions on the label and per safety data sheet instructions, no adverse effects are expected. However in case of mishandling or overexposure to the product, may result in symptoms of accute and Chronic effects.

**Information on Toxicity**: No published data or information available, however materials used in this product are considered non- hazardous.

**ACUTE EFFECTS**

| | |
|---|---|
| **Ingestion/Swallowed**: | May cause gastric irritation and result in nausea & vomiting, however ingestion of large amounts may be harmful and dangerous. |
| **Eye**: | Irritant on contact |
| **Skin**: | Prolonged exposure may cause irritation and dry skin, particularly to senstitive skins |
| **Inhaled**: | Non hazardous, but dusts may be irritant to the respiratory track or mucous membrane. |

**Chronic Toxicity:**

| | |
|---|---|
| **Mutagenicty:** | No data/information available, but material considered non hazardous |
| **Carcinogencity** | This material considered non hazardous |
| **Specific Organ Toxicity** | No information available but material considered non hazardous. |

## 11. TOXICOLOGICAL INFORMATION – Part 2 – Aluminium Sulphate

**Inhaled**
Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.|The dust may cause sore throat, coughing.
**Ingestion**
Accidental ingestion of the material may be damaging to the health of the individual.
Acute toxic responses to aluminium are confined to the more soluble forms.
**Skin Contact**
Irritating to skin.
The material may accentuate any pre-existing dermatitis condition
Open cuts, abraded or irritated skin should not be exposed to this material
Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects.
**Eye**
When applied to the eye(s) of animals, the material produces severe ocular lesions which are present twenty-four hours or more after instillation.
**Chronic**
Long term exposure to high dust concentrations may cause changes in lung function (i.e. pneumoconiosis) caused by particles less than 0.5 micron penetrating and remaining in the lung. A prime symptom is breathlessness.
Repeated minor skin contact may result in numbing of fingers. Repeated minor ingestion may cause phosphate deficiency; weakening bones.
**TOXICITY IRRITATION**
Intraperitoneal (Mouse) LD50: 274 mg/kg
Eye (rabbit): 10 mg/24h SEVERE
Oral (mouse) LD50: 6207 mg/kg

## 12. ECOLOGICAL INFORMATION - FOR BOTH PART 1 & Part 2

| | |
|---|---|
| **Ecotoxicity** | No data available |
| **Mobility** | Completely soluble in water. |
| **Environmental Fate** | Do NOT allow excessive product to reach waterways, drains and sewers**.** |
| **Bioaccumulation Potential** | No information available on bioaccumulation for this product. |
| **Environmental Impact** | No Data Available |

## 13. DISPOSABLE CONSIDERATIONS - FOR BOTH PART 1 & Part 2

General Information Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.

## 14. TRANSPORT INFORMATION - FOR BOTH PART 1 & Part 2

**National Transport Commission (Australia)**
Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
**Dangerous Goods Classification**
NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**Marine Transport**
Not classified as dangerous according to the criteria of International Marine Dangerous Goods (IMDG) for transport by sea.

**Air Tansport**
Not classified as dangerous according to the criteria of International Air Transport Association (IATA) Dangerous Goods regulation for transport by air.

## 15. REGULATORY INFORMATION

Constituents or materials used in this product are covered by Australian Inventory of Chemical Substances (AICS)

Poisons Schedule (Aust) Not scheduled

## 16. OTHER INFORMATION

The MSDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

**STATEMENT OF DISCLAIM:**

This Material Safety Data Sheet has been developed according to WHS Code of Practice Preparation of Safety Data Sheets for Hazardous Chemicals Guidelines and written in accordance with GHS format. All information is as accurate and up-to-date as possible. Since Manutec Pty Ltd cannot anticipate or control the conditions under which this information may be used, each user should review the information in the specific context of the intended application. Manutec Pty Ltd will not be responsible for damages of any nature resulting from use of or reliance upon this information.

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