

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER:

<b>Product Name:</b>	Tui Hydrangea Blue – Aluminium Sulphate
<b>Recommended Use:</b>	To acidify the soil to intensify the blue colour in hydrangeas or for acid loving plants in home gardens.
<b>Company &amp; Address:</b>	Evergreen Garden Care New Zealand Limited, Truman Lane, Mount Maunganui, New Zealand
<b>Company Telephone Number:</b>	+64 7 5752160
<b>Emergency Telephone Numbers:</b>	0800 CHEMCALL (0800 243 622) 24 hours 0800 POISON (0800 764 766) National Poisons Centre 111 – New Zealand Fire Service
<b>Date of SDS Preparation:</b>	January 2021

## 2. HAZARDS IDENTIFICATION:

<b>Dangerous Goods:</b>	Not classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.
<b>Hazardous Substance (HSNO):</b>	Classified as hazardous according to criteria in the HS (Minimum Degree of Hazard) Regulations 2001.
<b>HSNO Hazard Classifications:</b>	6.1D, 6.3A, 6.4A, 8.1A, 9.1B, 9.3C.
<b>Signal Word:</b>	Warning.



<b>Hazard Statements:</b>	Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May be corrosive to metals. Toxic to aquatic life with long lasting effects. Harmful to terrestrial vertebrates.
<b>Prevention Statements:</b>	Keep out of reach of children. Read label before use. Read Safety Data Sheet before use. Wash any exposed skin thoroughly with soap and water after handling. Do not eat, drink or smoke when using this product. Wear protective gloves. Wear eye/face protection. Keep only in original container. Store in corrosive resistant container.
<b>Response Statements:</b>	If medical advice is needed, have product container or label at hand. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. Take off contaminated clothing and wash before re-use. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Absorb spillage to prevent material damage.



Collect spillage.

**3. COMPOSITION/INFORMATION ON INGREDIENTS:**

COMPONENT	CONCENTRATION	CAS NUMBER
Aluminium Sulphate	100%	7784-31-8

**4. FIRST AID MEASURES:**

For advice, contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor/physician.

<b>Inhalation:</b>	Remove victim from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.
<b>Ingestion:</b>	Rinse mouth with water. Give water to drink provided person is conscious. Do NOT induce vomiting. Seek medical attention.
<b>Eye Contact:</b>	Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.
<b>Skin Contact:</b>	Remove contaminated clothing. Flush affected area with plenty of water. If irritation persists, seek medical attention. Wash contaminated clothing before re-use.
<b>Notes to Physician:</b>	Treat symptomatically based on judgement of doctor and individual reactions of patient.

**5. FIRE FIGHTING MEASURES:**

<b>Suitable Extinguishing Media:</b>	In case of fire, use water, chemical foam, or carbon dioxide (CO <sub>2</sub> ).
<b>Emergency Procedures:</b>	Clear fire area of all nonemergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk.
<b>Flammability Conditions:</b>	Product is a non-flammable solid.
<b>Hazardous Products of Combustion:</b>	Non-combustible solid. Not considered to be a fire or explosion hazard. When involved in a fire, this product may generate sulphur oxides.
<b>Incompatible Products:</b>	Incompatible materials have not been reported. However, this product is corrosive to metals in the presence of water. Hydrolysis to form dilute sulphuric acid.
<b>Precautions for fire fighters and special protective clothing:</b>	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots and gloves).
<b>Environmental Precautions:</b>	Do NOT allow firefighting water to reach waterways, drains or sewers. Store firefighting water for treatment. If contamination of sewers or waterways has occurred advise local emergency services.



## 6. ACCIDENTAL RELEASE MEASURES:

<b>Emergency Procedures:</b>	Avoid accidents, clean up immediately. Slippery when spilt. Personnel involved in the clean-up should wear full protective clothing as listed in section 8. Evacuate all unnecessary personnel. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Stop leak if safe to do so. Isolate the danger area. Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management. Use clean, non-sparking tools and equipment.
<b>Personal Precautions, Protective Equipment:</b>	Use appropriate protective equipment. Refer to SDS section 7 for handling and precautionary measures. Refer to SDS section 8 for additional information and personal protection equipment to prevent contamination of skin, eyes and personal clothing.
<b>Environmental Precautions:</b>	Contain - prevent from entering into soil, ditches, sewers, waterways and/or groundwater. If contamination of sewers or waterways has occurred advise local emergency services.
<b>Methods and Materials for Containment and Clean up:</b>	Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Transfer to a suitable, labelled waste container for safe disposal.

## 7. HANDLING & STORAGE:

### Precautions for safe handling and storage:

<b>Handling:</b>	Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product dust/fumes.
<b>Storage:</b>	Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. Store away from strong oxidising agents. Aluminium sulphate absorbs moisture and becomes a safety hazard when spilled because it will become very slippery.
<b>Container:</b>	Store in original packaging as approved by manufacturer.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

<b>Occupational Exposure Limits:</b>	No ADE, PDE or TEL values are set by EPA for this substance at this time. No WES values are set by EPA for this substance at this time. However, Workplace Exposure Standard(s) for constituent(s): Particulates not otherwise classified: 8hr WES-TWA = 10mg/m <sup>3</sup> (inhalable dust) or 3mg/m <sup>3</sup> (respirable dust).
<b>Engineering Controls:</b>	Handle in well-ventilated area. Avoid inhalation of dust. A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
<b>Personal Protective Equipment:</b>	Avoid contact with eyes, skin and breathing in dust. Wash hands before breaks and after work. Always wash hands before eating, drinking or smoking or using the toilet. <b>Respiratory Protection:</b> Use with adequate ventilation and avoid breathing dust. Wear an air supplied respirator, where dusts/vapours are generated and engineering controls are inadequate (AS1715/1716). <b>Skin protection:</b> Wear rubber or PVC gloves (AS2161). Wear long-sleeved protective clothing and safety footwear (AS3765/2210). Wash hands and exposed skin thoroughly after use. Wash protective clothing thoroughly before storage or reuse.

**Eye protection:**

Avoid eye contact and wear safety glasses with side shields (AS1336/1337).

**9. PHYSICAL AND CHEMICAL PROPERTIES:**

<b>Appearance:</b>	White to brownish solid
<b>pH:</b>	3.5
<b>Odour:</b>	None
<b>Vapour Pressure (20°C):</b>	Not available.
<b>Relative Vapour Density (air=1):</b>	Not available.
<b>Boiling Point (°C):</b>	Not available.
<b>Freezing Point (°C):</b>	770°C (Decomposes)
<b>Bulk Density:</b>	Not available.
<b>Solubility in water:</b>	87g/100cc (27°C)
<b>Specific Gravity (g/ml @ 20°C):</b>	Not available.
<b>Flash point (°C):</b>	Not available.
<b>Volatile Percentage:</b>	0% (21°C).
<b>Decomposition Temperature:</b>	770°C

**10. STABILITY and REACTIVITY:**

<b>Chemical Stability:</b>	Stable under normal conditions of use.
<b>Conditions to avoid:</b>	Avoid contact with incompatible materials. Avoid dust generation.
<b>Incompatible materials:</b>	Incompatible materials have not been reported. However, this product is corrosive to metals in the presence of water.
<b>Hazardous decomposition products:</b>	When involved in a fire, this product may generate sulphur oxides. Hydrolysis to form dilute sulphuric acid.
<b>Hazardous Reactions:</b>	Hazardous polymerisation will not occur.

**11. TOXICOLOGICAL INFORMATION:**

**Potential Health Effects:** This section includes possible adverse effects, which could occur if the product is not handled in the recommended manner.

<b>Eye Contact:</b>	Causes serious eye irritation.
<b>Skin Contact:</b>	Causes skin irritation.
<b>Ingestion:</b>	Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastro- intestinal tract. Oral LD <sub>50</sub> for rats >5000 mg/kg.
<b>Inhalation:</b>	No information available on the symptoms of inhalation for this product.
<b>Special Properties:</b>	Astringent.

**12. ECOLOGICAL INFORMATION:**



**Ecotoxicity:**

Avoid contamination of waterways, drains or sewers.  
Quantitative data on the ecological effects of this product are not available.  
Further ecologic data: The following applies to aluminium compounds in general: for acidic aluminium compounds: biological effect: toxic for water organisms. Fish: toxic as from 0.55 mg/l ;in very soft water toxic as from 0.1 mg/l; crustaceans : D magna toxic as from 136 mg/l ; algae : Sc aquadricauda toxic as from 1.5mg/L (all values referring to dissolved Al). In the case of alkaline aluminium compounds, flocculation may cause mechanical damage in aquatic organisms. The following applies to sulphate in general: biological effects: fish: toxic as from 7g/L bacteria: toxic as from 2.5 g/l.  
No ecological problems are to be expected when the product is handled and used with due care and attention.

**Persistence/Degradability:** No information available on persistence/degradability for this product.

**Mobility:** No information available on mobility for this product.

**Environmental Fate:** Avoid contamination of waterways, drains or sewers.

**Bioaccumulation Potential:** No information available on bioaccumulation for this product.

**Environmental Impact:** No Data Available.

**13. DISPOSAL CONSIDERATIONS:**

**Disposal methods:** Dispose of this product by using in accordance with the product label directions. Do not dispose of this product or equipment cleaning water down drains or sewers. Container disposal – Clean out empty packaging, puncture and dispose of at an approved landfill. Do not use the container for any other purpose. If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local area regulatory authorities following all applicable regional, national and local laws and regulations. Some local authorities offer hazardous waste collection, contact your local council for details.

**14. TRANSPORT INFORMATION:**

Not classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.

Not classified as a Dangerous Good by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Not classified as a Dangerous Good by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

**15. REGULATORY INFORMATION:**

**EPA New Zealand Approval Code:** HSR004337.

**Exposure limits:** No WES values are set by EPA for this substance at this time.



## 16. OTHER INFORMATION:

**Date of preparation of SDS:** January 2021.

**Abbreviations in SDS:**

**ADE:** Acceptable daily exposure values set by EPA.

**EPA:** The Environmental Protection Authority of New Zealand.

**PDE:** Potential daily exposure values set by EPA.

**pH:** A measurement of how acidic or alkaline a material is using a scale of 1 -14.  
pH 1 is strongly acidic, pH 14 is strongly alkaline.

**TEL:** Tolerable exposure limit set by EPA.

**WES:** Work place exposure standard set by EPA or NZ Dept. of Labour Health & Safety.

**DISCLAIMER:**

This product must be used strictly as directed. To the maximum extent permitted by law Evergreen Garden Care New Zealand Limited, its officers, employees, agents, distributors and retailers shall have no liability to any purchaser or user of this product, or any other person, for any loss, damage or injury (including personal injury) arising out of the use or storage of this product otherwise than in accordance with the directions for use and storage.

----- End of SDS -----