

Section 1 - Identification of the Material and Supplier

Chemical nature: Fertiliser, soil amendment
Trade Name: Ferrous Sulfate Heptahydrate
Other Names: Iron Sulphate Heptahydrate
Product Use: Fertiliser, soil amendment, pH adjustment
Supplier: Amgrow Pty Ltd
3/29 Birnie Ave
Lidcombe NSW 2141
Phone: 02 9395 1200 (office hours)
Fax: 02 9393 1241
www.amgrow.com.au

This version issued: November 2016 and is valid for 5 years from this date.

Section 2 - Hazards Identification

Statement of Hazardous Nature

THIS PRODUCT IS CLASSIFIED AS: NOT CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF SWA.

NOT A DANGEROUS GOOD ACCORDING TO AUSTRALIAN DANGEROUS GOODS (ADG) CODE, IATA OR IMDG/IMSBC CRITERIA.

Risk Phrases: Not Hazardous - No criteria found.

Safety Phrases: S23, S36, S24/25. Do not breathe dusts. Wear suitable protective clothing. Avoid contact with skin and eyes.

SUSMP Classification: None allocated.

UN Number: None allocated

GHS Signal word: NONE. Not hazardous.

PREVENTION

P102: Keep out of reach of children.

P262: Do not get in eyes, on skin, or on clothing.

P281: Use personal protective equipment as required.

RESPONSE

P353: Rinse skin or shower with water.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P370+P378: Not combustible. Use extinguishing media suited to burning materials.

STORAGE

P402+P404: Store in a dry place. Store in a closed container.

DISPOSAL

P501: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

Emergency Overview

Physical Description & Colour: Light green crystalline solid

Odour: Slight metallic odour

Major Health Hazards: no significant risk factors have been found for this product.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc, %
Ferrous Sulphate Heptahydrate	7782-63-0	100

Minor quantities of other non hazardous ingredients are also possible.

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Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Inhalation: Not highly likely route of exposure due to nature of product. However if exposed, remove victim to fresh air. Recovery is rapid after removal from exposure. Seek medical attention if irritation persists or breathing difficulties arise

Skin Contact: Remove contaminated clothing and wash thoroughly with soap and water.

Eye Contact: Hold eye open and flush gently with copious amounts of water for 15 minutes and seek medical attention.

Ingestion: If swallowed, induce vomiting as directed by medical personnel. Immediately rinse mouth out with water. Give water. Contact Poisons Information Centre or doctor immediately.

Advice to Doctor: Treat symptomatically

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

Fire Decomposition: may generate sulphur dioxide

Extinguishing Media: Not combustible. Use extinguishing media suited to burning materials.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade.

Flash point: Does not burn.

Upper Flammability Limit: Does not burn.

Lower Flammability Limit: Does not burn.

Auto ignition temperature: Not applicable - does not burn.

Flammability Class: Does not burn.

Section 6 - Accidental Release Measures

Accidental release: Minor spills do not normally need any special cleanup measures. In the event of a major spill, prevent spillage from entering drains or water courses. Wear protective clothing including impervious gloves and safety goggles. All skin should be covered. Thoroughly launder protective clothing before storage or re-use. Stop leak if safe to do so, and contain spill. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. If a significant quantity of material enters drains, advise emergency services. Refer to product label for specific instructions. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. This product may be suitable for disposal in land fill.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: Store in cool, dry area removed from foodstuffs. Ensure containers are labelled, protected from physical damage and sealed when not in use. Do not allow to come into contact with water either from rain, condensation or the surface on which it is stored. Bagged fertilisers should be stored under cover and out of direct sunlight. Store away from farm chemicals e.g. insecticides, fungicides and herbicides.

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Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

SWA Exposure Limits	TWA (mg/m ³)	STEL (mg/m ³)
Ferrous Sulphate Hepta	1	not set

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Personal Protection

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that dusts are minimised.

Eye Protection: Eye protection such as protective glasses or goggles is recommended when this product is being used.

Skin Protection: You should avoid contact even with mild skin irritants. Therefore you should wear suitable impervious elbow-length gloves and facial protection when handling this product. See below for suitable material types.

Protective Material Types: We suggest that protective clothing be made from the following materials: cotton, rubber, PVC.

Respirator: If there is a significant chance that dusts are likely to build up in the area where this product is being used, we recommend that you use a suitable Dust Mask.

Safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Light green crystalline solid
Odour:	Slight metallic odour.
Boiling Point:	Not relevant
Melting Point:	64°C
Volatiles:	Not relevant
Vapour Pressure:	Not relevant.
Vapour Density:	Not relevant
Density:	0.8-0.9 Kg/L
Water Solubility:	Soluble 360g/l (25°C)
pH: (1% solution):	approx 2

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: Keep containers tightly closed. Containers should be kept dry.

Incompatibilities: Alkalis, soluble carbonates and oxidising materials

Fire Decomposition: May evolve sulfur oxides

Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Local Effects:

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Target Organs: There is no data to hand indicating any particular target organs.

Potential Health Effects

Toxicity to Animals: Oral LD₅₀ rat: 1480mg/Kg

Acute Effects on Humans: Harmful if swallowed. Ingestion of large quantities can be reabsorbed through the intestines and may induce a paralysis similar to magnesium narcosis. Ingestion of toxic amounts leads to vomiting, hypotonia, hyporeflexia and tarry stool. Gastric strictures may develop. Irritating to eyes and skin and inhalation of dusts/vapours may cause respiratory tract irritation.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

Classification of Hazardous Ingredients

Ingredient

Risk Phrases

No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations.

Section 12 - Ecological Information

Environment: Avoid contamination of waterways.

Aquatic organisms: No data available,

Flora: No data available

Bees: Not toxic.

Long term Ozone effects: None recorded.

Bioaccumulative potential: Unknown but probably low

Section 13 - Disposal Considerations

Disposal: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service. This product can usually be used for its intended purpose unless contaminated by substances that make it unsuited. May be suitable for landfill

Section 14 - Transport Information

UN Number: This product is not classified as a Dangerous Good by ADG, IATA or IMDG/IMSBC criteria. No special transport conditions are necessary unless required by other regulations.

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 th edition)
AICS	Australian Inventory of Chemical Substances
SWA	Safe Work Australia, formerly ASCC and NOHSC
CAS number	Chemical Abstracts Service Registry Number
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially fire-fighters
IARC	International Agency for Research on Cancer
NOS	Not otherwise specified

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NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
UN Number	United Nations Number

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (December 2011)
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