

# **Safety Data Sheet**

# Egmont Lawn Moss Control Sulphate of Iron

### 1. IDENTIFICATION

**Product Name** Ferrous Sulphate Heptahydrate

Other Names Iron (II) Sulphate (1:1) Heptahydrate; Iron Protosulphate; SULFURIC

ACID, IRON (2+) SALT (1:1), HEPTAHYDRATE

**Uses** Water and sewage treatment; reducing agent; wood preservative;

fertiliser; chemical manufacture

Product DescriptionNo Data AvailableChemical FamilyNo Data AvailableChemical FormulaFe.H2O4S.7H2O

**Chemical Name** Ferrous Sulphate Heptahydrate

# Contact Details of the Supplier of this Safety Data Sheet

Organisation Location Telephone Egmont Commercial Ltd 347 Marshs Road +64 3 3495546

Halswell Christchurch

#### **Emergency Contact Details**

For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Chemcall	New Zealand	0800-243622
National Poisons Centre	New Zealand	0800-764766

#### 2. HAZARD IDENTIFICATION

Poisons Schedule (Aust) Not scheduled

**Environmental Protection Authority (New Zealand)** 

Hazardous Substances and New Organisms Amendment Act 2015



**HSNO Classifications** 

**Health Hazards** 6.1D Substances that are acutely toxic – Harmful

6.3A Substances that are irritating to the skin 6.4A Substances that are irritating to the eye

**Environmental** 9.1D Substances that are slightly harmful to the aquatic

environment or are otherwise designed for biocidal action

Hazards

9.3C Substances that are harmful to terrestrial vertebrates

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Ingredients** 

Chemical Entity Ferrous Sulphate Heptahydrate

Formula No Data Available

CAS Number 7782-63-0 Proportion 90.0 - 100.0 %

#### 4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

**Swallowed** Rinse mouth with water. If swallowed, do NOT induce vomiting. Give

a glass of water. Never give anything by the mouth to an unconscious patient. Seek immediate medical assistance.

**Eye** If in eyes, hold eyelids apart and flush the eye continuously with

running water. Continue flushing until advised to stop by a Poisons

Information Centre or a doctor, or for at least 15 minutes.

**Skin** If skin or hair contact occurs, immediately remove any contaminated

clothing and wash skin and hair thoroughly with running water. If swelling, redness, blistering or irritation occurs seek medical

assistance.

**Inhaled** Remove victim from area of exposure - avoid becoming a casualty.

Seek medical advice if effects persist.

Advice to Doctor Treat symptomatically based on judgement of doctor and individual

reactions of patient.

# **Medical Conditions Aggravated by Exposure**

No information available on medical conditions which are

aggravated from exposure to this product.



#### **5. FIRE FIGHTING MEASURES**

**General Measures** 

Clear fire area of all non-emergency 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.

**Flammability Conditions** 

Product is a non-flammable solid.

**Extinguishing Media** 

Not combustible, however, if material is involved in a fire use: Extinguishing media appropriate to surrounding fire conditions.

Fire and Explosion Hazard

Non-combustible material

**Hazardous Products of Combustion** 

Decomposes on heating emitting toxic fumes, including those of oxides of sulphur.

**Special Fire Fighting Instructions** 

Do NOT allow fire-fighting water to reach waterways, drains or sewers. Store fire-fighting water for treatment.

**Personal Protective Equipment** 

Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire-fighting clothing (includes fire-fighting helmet, coat, trousers, boots and gloves). Clear fire area of all non-emergency 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.

Do NOT allow fire-fighting water to reach waterways, drains or

sewers. Store fire-fighting water for treatment.

Flash Point

Lower Explosion Limit

Upper Explosion Limit

Auto Ignition Temperature

Hazchem Code

No Data Available

No Data Available

No Data Available

#### **6. ACCIDENTAL RELEASE MEASURES**

#### **General Response Procedure**



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

# **Clean Up Procedures**

Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Transfer to a suitable, labelled container and dispose of promptly as hazardous waste. Place under an inert atmosphere.

#### Containment

Stop leak if safe to do so. Isolate the danger area.

#### **Environmental Precautionary Measures**

Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.

#### **Evacuation Criteria**

Evacuate all unnecessary personnel.

# **Personal Precautionary Measures**

Personnel involved in the clean-up should wear full protective clothing as listed in section 8.

# 7. HANDLING AND STORAGE

#### Handling

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. Remove contaminated clothing and wash before reuse. Do not ingest or inhale. Handle under an inert atmosphere. Store protected from air.

# Storage

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 protected from air. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.



**Container** Container type/packaging must comply with all applicable local

legislation. Store in original packaging as approved by manufacturer.

# **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

General

No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s): Iron salts, soluble (as Fe): 8hr TWA = 1 mg/m3.As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

**Exposure** 

Limits No Data Available

**Biological Limits** 

No information available on biological limit values for this product.

**Engineering Measures** 

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.

**Personal Protection Equipment** 

**RESPIRATOR** Wear an approved respirator where dusts/vapours are generated

and engineering controls are inadequate (AS1715/1716)

**EYES** Use chemical safety goggles and/or a full-face shield (AS1336/1337).

**HANDS** Wear protective gloves (AS2161).

**CLOTHING** Long-sleeved protective clothing and safety footwear

(AS3765/2210).

**Work Hygienic Practices** 

No Data Available

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid Odour Odourless Appearance Solid

Colour Light Grey to Off-white or White

pH 3.7 10% solution
Vapour Pressure No Data Available
Relative Vapour Density No Data Available

Boiling Point300degs CMelting Point64degs CFreezing Point64degs C

Solubility Soluble in water 25degs C



Specific Gravity

Flash Point

Auto Ignition Temp

Evaporation Rate

Bulk Density

Corrosion Rate

1.898 water = 1

No Data Available

No Data Available

No Data Available

No Data Available

Decomposition Temperature 300degs C

Density No Data Available Specific Heat No Data Available Molecular Weight No Data Available Net Propellant Weight No Data Available **Octanol Water Coefficient** No Data Available Particle Size No Data Available **Partition Coefficient** No Data Available Saturated Vapour Concentration No Data Available Vapour Temperature No Data Available Viscosity No Data Available Volatile Percent No Data Available **VOC Volume** No Data Available **Additional Characteristics** No Data Available

Potential for Dust Explosion Non-combustible material.

Fast or Intensely Burning

Characteristics No Data Available

Flame Propagation or Burning

Rate of Solid Materials No Data Available

Non-Flammables That Could Contribute Unusual Hazards to a

Fire No Data Available

Properties That May Initiate or

Contribute to Fire Intensity No Data Available

**Reactions That Release Gases** 

or Vapours No Data Available

Release of Invisible Flammable

Vapours and Gases No Data Available

# **10. STABILITY AND REACTIVITY**

# **General Information**

Hygroscopic: absorbs moisture or water from surrounding air.

#### **Chemical Stability**

Stable.



#### **Conditions to Avoid**

Avoid excessive heat, generating dust, direct sunlight, moisture, static discharges and high temperatures.

#### **Materials to Avoid**

Incompatible with alkalis, oxidising agents, soluble carbonates, gold and silver salts, lead acetate, lime water, potassium, potassium iodide, sodium tartrate, sodium borate, tannin, vegetable astringent infusions and decoctions.

#### **Hazardous Decomposition Products**

During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Burning may produce sulphur oxides.

#### **Hazardous Polymerisation**

Hazardous polymerisation will not occur.

#### 11. TOXICOLOGICAL INFORMATION

**General Information** 

Oral LD50 (rat): 319 mg/kg.

Evidence indicates that repeated or prolonged exposure to this

chemical could result in effects on the liver.

**Eye Irritant** Causes irritation to eyes with redness and pain.

**Ingestion** Swallowing can result in nausea, vomiting, diarrhoea, and

gastrointestinal irritation. Symptoms of swallowing large

amounts of soluble iron compounds may be delayed several hours and can include epigastric pain, vomiting blood and circulatory

failure.

**Inhalation** Breathing in dust may result in respiratory irritation.

**Skin Irritant** Causes irritation to skin. Symptoms include redness, itching and

pain.

Carcinogen Category No Data Available

# **12. ECOLOGICAL INFORMATION**

Ecotoxicity No ecological information available for this product.

Persistence/Degradability No information available on persistence/degradability for this

product.

Mobility

No information available on mobility for this product.

Environmental Fate

Do not allow product to enter waterways, drains or sewers.

No information available on bioaccumulation for this product.

Environmental Impact No Data Available



#### **13. DISPOSAL CONSIDERATIONS**

# **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.

# **Special Precautions for Land Fill**

Contact a specialist disposal company or the local waste regulator

for advice.

This should be done in accordance with 'The Hazardous Waste Act'.

#### 14. TRANSPORT INFORMATION

# **Land Transport (New Zealand)** NZS5433

Proper Shipping Name FERROUS SULPHATE HEPTAHYDRATE

Class No Data Available Subsidiary Risk(s) No Data Available **UN Number** No Data Available Hazchem No Data Available No Data Available Pack Group **Special Provision** No Data Available

# **Sea Transport**

#### **IMDG**

Proper Shipping Name FERROUS SULPHATE HEPTAHYDRATE

Class No Data Available Subsidiary Risk(s) No Data Available **UN Number** No Data Available Hazchem No Data Available Pack Group No Data Available Special Provision No Data Available **EMS** No Data Available

Marine Pollutant No

# **Air Transport IATA**

Proper Shipping Name FERROUS SULPHATE HEPTAHYDRATE

Class No Data Available Subsidiary Risk(s) No Data Available **UN Number** No Data Available



Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available

#### 15. REGULATORY INFORMATION

General Information No Data Available Poisons Schedule (Aust) Not scheduled

# **Environmental Protection Authority (New Zealand)**

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code HSR003427

National/Regional Inventories

Australia (AICS) Listed

Canada (DSL)

Canada (NDSL)

China (IECSC)

Europe (EINECS)

Europe (REACh)

Japan (ENCS/METI)

Korea (KECI)

Not Determined

Not Determined

Not Determined

Not Determined

Malaysia (EHS Register) Not Determined

New Zealand (NZIoC) Listed

Philippines (PICCS) Not Determined

Switzerland (Giftliste 1) Not Determined

Switzerland (Inventory of Notified

Substances) Not Determined

Taiwan (NCSR) Not Determined

USA (TSCA) Not Determined

#### **16. OTHER INFORMATION**

#### **Related Product Codes**

FESULP0600, FESULP0601, FESULP0700, FESULP0800, FESULP0801, FESULP1300, FESULP1400, FESULP1500, FESULP1501, FESULP1502, FESULP1600, FESULP1601, FESULP1700, FESULP1701, FESULP1800, FESULP1801, FESULP1802, FESULP1803, FESULP1804, FESULP1805, FESULP1806, FESULP1807, FESULP1808, FESULP1809, FESULP1810, FESULP1811, FESULP1812, FESULP1813, FESULP1814, FESULP1815, FESULP1816, FESULP1817, FESULP1818, FESULP1819, FESULP1820, FESULP1821, FESULP1822, FESULP1823, FESULP1824, FESULP1825, FESULP1826, FESULP1827, FESULP1900, FESULP2000, FESULP2100, FESULP2400, FESULP2500, FESULP2900, FESULP3501, FESULP3502, FESULP3510, FESULP3900, FESULP3901, FESULP3902, FESULP3903, FESULP4100, FESULP4500, FESULP4501, FESULP4502, FESULP4600, FESULP4800, FESULP4900, FESULP5000, FESULP5001,



FESULP5100, FESULP5200, FESULP5300, FESULP5400, FESULP5500, FESULP5501, FESULP5502, FESULP5503, FESULP5504, FESULP6000, FESULP6001, FESULP6100, FESULP6200, FESULP6500, FESULP6600, FESULP6610, FESULP6630, FESULP6640, FESULP6650, FESULP7000, FESULP7001, FESULP7400, FESULP7500, FESULP8000, FESULP8001, FESULP8200, FESULP8300, FESULP8600, FESULP9000, FESULP9500, FESULP9600, FESULP9800, FESULP9900, FESULP9901, FESUPH1000, FESUPH1500, FESUPH2000, FESUPH2500.

Revision 2

Revision Date 27 Jul 2015

Key/Legend < Less Than

> Greater Than

AICS Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

Cm2 Square Centimetres CO2 Carbon Dioxide

COD Chemical Oxygen Demand

deg C Degrees Celcius

EPA (New Zealand) Environmental Protection Authority of New

Zealand

deg F Degrees Farenheit

g Grams

g/cm3 Grams per Cubic Centimetre

g/l Grams per Litre

HSNO Hazardous Substance and New Organism
IDLH Immediately Dangerous to Life and Health

immiscible Liquids are insoluable in each other.

inHg Inch of Mercury inH2O Inch of Water

K Kelvin kg Kilogram

kg/m3 Kilograms per Cubic Metre

lb Pound

LC50 LC stands for lethal concentration. LC50 is the concentration

of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set

period of time, usually 1 or 4 hours.

LD50 LD stands for Lethal Dose. LD50 is the amount of a material,

given all at once, which causes the death of 50% (one half)

of a group of test animals.

Itr or L Litre

m3 Cubic Metre mbar Millibar mg Milligram

mg/24H Milligrams per 24 Hours mg/kg Milligrams per Kilogram mg/m3 Milligrams per Cubic Metre

Misc or Miscible Liquids



Form one homogeneous liquid phase regardless of the

amount of either component present

mm Millimetre

mmH2O Millimetres of Water mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

NOHSC National Occupational Health and Safety Commission

OECD Organisation for Economic Co-operation and Development

Oz Ounce

PEL Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion ppm Parts per Million

ppm/2h Parts per Million per 2 Hours ppm/6h Parts per Million per 6 Hours psi Pounds per Square Inch

R Rankine

RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value

tne Tonne

TWA Time Weighted Average ug/24H Micrograms per 24 Hours

UN United Nations

wt Weight