



# Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Sulphate of Iron

Version:1.0

Revision date: 29.06.2018

Print date: 29.06.2018

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

**1.1 Product identifier** Sulphate of Iron

**1.2 Relevant identified use** Garden Fertiliser /Plant nutrient

**1.3 Details of the supplier of the safety data sheet:**

Westland Horticulture Ltd  
14 Granville Industrial Estate  
Granville Road  
Dungannon  
County Tyrone  
BT70 1NJ

**Email** [customerservice@WestlandHorticulture.com](mailto:customerservice@WestlandHorticulture.com)

**1.4 Emergency telephone number** 01480 443789 (UK) 24hrs

## 2. HAZARDS IDENTIFICATION

**2.1 Classification of the Substance or Mixture According to Regulation (EC) No 1272/2008:**

Acute Tox. 4	H302	Harmful if swallowed
Skin Irrit. 2	H315	Causes skin irritation
Eye Irrit. 2	H319	Causes serious eye irritation

**2.2 Label Elements According to Regulation (EC) No 1272/2008:**

Hazard Pictograms GHS07



Signal Word Warning

Hazard Statements	H302	Harmful if swallowed
	H315	Causes skin irritation
	H319	Causes serious eye irritation

Precautionary Statements

P280 Wear protective gloves/protective clothing/eye protection/face protection



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P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

P321 Specific treatment (see on this label)

P362 Take off contaminated clothing and wash before reuse

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P501 Dispose of contents/container in accordance with local / regional / national/ international regulations

EUH 401 To avoid risks to human health and the environment, comply with the instructions for use

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances:** Iron (II) Sulphate Heptahydrate

**3.2 Description:** N/A

### Hazardous Ingredients

Ingredient	Identifiers	Concentration %W/W	Warning Symbols	Regulation (EC) No 1272/2008 (CLP)
Iron (II) Sulphate Heptahydrate	CAS: 7720-78-7 EC 231-753-5	>97% W/W		Acute Tox 4; Skin irrit 2; eye irrit 2

**Additional information:** See Section 16 for the full text of the H statements declared above

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General information:** Have the product container, label or Material Safety Data Sheet with you when calling a poison control center or physician, or going for treatment.

Symptoms of poisoning may even occur after several hours; therefore medical observation is recommended for 48 hours at least after the accident



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**Inhalation:** Move person to fresh air.  
Keep patient warm and at rest.  
Get medical advice if symptoms persist or develop

**Skin Contact:** Wash off with soap and plenty of water.  
Get medical advice if irritation persists or develop

**Eye Contact:** Rinse with plenty of water, also under the eyelids, for at least 15 minutes.  
Remove contact lenses and continue flushing.  
Get medical attention if symptoms persist or develop

**Ingestion:** Do not induce vomiting unless directed to do so by medical personnel  
Rinse out mouth and then drink water  
Get medical attention if symptoms persist or develop

## 4.2 Most important symptoms and effects, both acute and delayed

Information not available

## 4.3 Indication of any immediate medical attention and special treatment needed

Information not available

## 5. FIRE FIGHTING MEASURES

### 5.1 Extinguishing Media:

Use foam, carbon dioxide, dry powder or sand  
The mixture is not classified as flammable; as such extinguishing media should be chosen as appropriate for surrounding materials.

### 5.2 Specific Hazards Arising From the Substance or Mixture:

Fire will produce hazardous products of combustion  
Exposure to decomposition products may be a hazard to health.

### 5.3 Advice for Fire Fighters:

Wear full protective clothing and self-contained breathing apparatus as required.

### Additional Information:

Cool endangered containers with water spray  
Do not allow molten material or run-off from fire fighting to enter drains or water courses.  
If fire run-off water enters drains or water course, inform the appropriate water authorities immediately



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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Avoid formation / breathing of dust  
Avoid contact with skin and eyes  
Ensure adequate ventilation  
Use Personal Protective Equipment: coveralls, gloves and eye/face protection

### 6.2 Environmental Precautions:

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers

### 6.3 Methods and Materials for Containment and Cleaning Up:

Vacuum or sweep up material.  
Place into suitable labelled containers for disposal according to local / national regulations

**Additional information:** If large quantities of the product contaminates water courses or drains (including via contaminated soil & vegetation), inform respective authorities.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### Handling:

- Prevent dust formation and inhalation
- Avoid contact with eyes and skin
- Wear gloves when handling the product over long periods of time
- Do not eat, drink or smoke when using this product
- Take off contaminated clothing and wash before reuse
- Avoid unnecessary exposure to atmosphere to prevent moisture pick up
- Wash hands and observe good hygiene practice after handling this product

### 7.2 Conditions for safe storage, including any incompatibilities

- Keep containers closed tightly in a dry, cool and well-ventilated place.
- Keep product in original labelled containers
- Keep away from oxidizing agents
- Protect from heat and direct sunlight



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- Storage areas should be appropriately sited to prevent contamination of drains or watercourses
- Keep out of the reach of children

### 7.3 Specific End Uses:

Use as a fertiliser according to the instruction on the label

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control Parameters

Ingredients with limit values that require monitoring at the workplace:

Work Exposure Limit (WEL)	Derived No Effect Level (DNELs)	Predicted No Effect Concentration (PNECs)
Short Term value: 2 mg/m <sup>3</sup> as Fe	Oral: 0.29 mg/kg bw/day (Consumer)	Sewage treatment plant: 500mg/l
Long Term value: 1 mg/m <sup>3</sup> as Fe	Dermal: 0.29 mg/kg bw/day (Consumer) 0.57 mg/kg bw/day (Workers)	Sediment: 49.5 mg/kg sedi. dw
	Inhalative: 0.5 mg/m <sup>3</sup> (Consumer) 2.01 mg/m <sup>3</sup> (Workers)	Soil: 55mg/kg soil dw

### 8.2 Exposure Controls

**8.2.1 Appropriate engineering controls:** No special ventilation requirements.

Avoid high dust concentration and provide ventilation where necessary

**8.2.2 Personal protective equipment:** The use of technical measures should always have priority over the use of personal protective equipment

A risk assessment based on the task being performed and the risks involved should be carried out to determine personal protection equipment required

When selecting personal protective equipment, seek appropriate professional advice

Personal protective equipment should be certified to appropriate standards

**Respiratory Protection:** Not necessary if room is well ventilated

Use suitable dust respirator if dust concentration is high (Filter P2)

**Hand Protection:**

Wear suitable gloves when handling the product over long periods or if a risk assessment indicates this is necessary. Gloves complying with EN420



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**Eye Protection:** Wear eye protection when a risk assessment indicates this is necessary to avoid exposure to dust. Safety glasses complying with EN166 as a minimum

**Skin and Body Protection:** Protective work clothing

**8.2.3 Environmental exposure controls:** N/A

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

**Appearance:** Light blue, grey or green powder. Product turns brown on exposure to air due to oxidation

**Physical state:** solid

**Colour:** Light blue, grey or green powder

**Odour:** Characteristic (sour rust)

**Odour threshold:** none known

### 9.2 Other information:

	Value	Concentration	Method	Temperature	Pressure	Remark
pH	20.-3.0	-	-	21 °C	-	-
Melting point/freezing point	-	-	-	-	-	-
Initial boiling point/boiling range	-	-	-	-	-	-
Flash point	-	-	-	-	-	-
Evaporation rate	-	-	-	-	-	-
Flammability (solid, gas)	-	-	-	-	-	-
Upper/lower flammability or explosive limits	-	-	-	-	-	-



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Upper explosive limits	-	-	-	-	-	-
Lower explosive limits	-	-	-	-	-	-
Vapour pressure	-	-	-	-	-	-
Vapour density	-	-	-	-	-	-
Relative density	850-1200kg/m <sup>3</sup>	-	-	-	-	-
Solubility(ies)	228g/l	-	-	25 °C	-	-
Partition coefficient: n-octanol/water	-	-	-	-	-	-
Auto-ignition temperature	-	-	-	-	-	-
Decomposition temperature	->300°C	-	-	-	-	-
Viscosity	-	-	-	-	-	-
Viscosity, dynamic	-	-	-	-	-	-
Viscosity, cinematic	-	-	-	-	-	-
Explosive properties	-	-	-	-	-	-
Oxidising properties	-	-	-	-	-	-

Physical hazards: none known

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity:** Stable under normal conditions of storage, handling and use

**10.2 Chemical Stability:** Stable under normal conditions of storage, handling and use

**10.3 Possible hazardous reactions:** Information not available

**10.4 Conditions To Avoid:** Extremes of temperature

**10.5 Incompatible Materials:** Information not available

**10.6 Hazardous decomposition products:** Heating or fire can release toxic or irritant vapours and fumes( Sulphur oxides)



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## 11. TOXICOLOGICAL INFORMATION

### Toxicokinetics, metabolism and distribution

#### 11.1 Information on toxicological effects

This product is expected to be of a low toxicity but prolonged skin or eye contact may cause some irritation

**Acute Toxicity:** LD50 Median lethal dose, 670mg/kg (Mouse), 3200mg/kg (Rat)

**Skin corrosion/Irritation:** Irritant to skin and mucus membranes

**Eye damage/Irritation:** Irritating effect

**Respiratory or Skin Sensitization:** The mixture is not classified as a sensitizer based on formulation components

#### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

The mixture is not classified as mutagenic, carcinogen, reproductive toxic or aspiration hazard based on formulation components

**Other information:** None known

## 12. ECOLOGICAL INFORMATION

The mixture has not been tested.

#### 12.1 Ecotoxicity:

- **Toxicity To Fish:** Median Lethal Concentration, LC50 1.8 mg/l, 96h  
NOEC 0.24 mg/l
- **Toxicity To Aquatic Invertebrates:** EC50 Daphnia magna (water flea), 5.3 mg/l 24h





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- **Toxicity To Aquatic Plants:** none known

**12.2 Persistence and Degradability:** Easily biodegradable

**12.3 Bioaccumulative Potential:** Does not accumulate in organisms

**12.4 Mobility in Soil:** No information available on mixture

**12.5 PBT and vPvB assessment:** No information available on mixture

**12.6 Other adverse effects:** Keep away from water courses, ground water or sewage system. Report any accidental contamination of water courses to the authorities

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product:** Do not contaminate ponds, waterways or ditches with product or used container. Check if agriculture use is possible. Dispose of by use on farm as a fertiliser, by spreading thinly on open ground  
Where possible recycling is preferred to disposal or incineration.  
If recycling is not practicable, dispose of in compliance with local regulations.

**Contaminated Packaging:** Empty remaining contents.  
Completely empty containers can be put in the bin or disposed of in compliance with applicable local regulations

## 14. TRANSPORT INFORMATION

	Land transport (ADR/RID)	Inland waterway transport (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
<b>14.1 UN No.</b>	Not dangerous goods	Not dangerous goods	Not dangerous goods	Not dangerous goods
<b>14.2 UN Proper shipping name</b>	Not dangerous goods	Not dangerous goods	Not dangerous goods	Not dangerous goods
<b>14.3 Transport hazard class(es)</b>	Not dangerous goods	Not dangerous goods	Not dangerous goods	Not dangerous goods



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<b>Hazard label(s)</b>	Not dangerous goods	Not dangerous goods	Not dangerous goods	Not dangerous goods
<b>14.4 Packing group</b>	Not dangerous goods	Not dangerous goods	Not dangerous goods	Not dangerous goods
<b>14.5 Environmental hazards</b>	Not dangerous goods	Not dangerous goods	Not dangerous goods	Not dangerous goods

**14.6 Special precautions for user:** None known

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

**Additional information:** None known

## 15. REGULATORY INFORMATION

**15.1 Safety, health and environmental regulations/legislation specific for the substance of mixture:**

This mixture is classified in accordance with Regulation 1272/2008.

**15.2 Chemical Safety Assessment:** A Chemical Safety Assessment has been undertaken for this product

## 16. OTHER INFORMATION

**16.1 Indication of changes**

**16.2 Abbreviations and Acronyms**

ADR	International Carriage of Dangerous Goods by Road
CAS No	Chemicals Abstract Service Registry Number
Directive 67/548/EEC	Dangerous Substances Directive (DSD)
EC No	European Community Number for chemicals within EU regulations
IATA-DGR	Dangerous Goods Regulations by the International Air Transport Association
IMDG Code	International Maritime Dangerous Goods Code
PBT	Persistent, Bioaccumulative and Toxic Properties
Regulation (EC) No 1272/2008	Classification, Labelling and Packaging (CLP)
RID	International Transport of Dangerous Goods by Rail
vPvB	Very Persistent and Very Bioaccumulative Properties



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## 16.3 Key literature references and sources for data

## 16.4 Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008

[CLP]: See SECTION 2.1 (classification).

## 16.5 Relevant H- and EUH-phrases (number and full text):

Acute Tox. 4	H302	Harmful if swallowed
Skin Irrit. 2	H315	Causes skin irritation
Eye Irrit. 2	H319	Causes serious eye irritation

## 16.6 Training advice: Follow the instructions

## 16.7 Further information

Before using this product, ensure that you read and understand its label

### MSDS information:

This Safety Data Sheet is prepared in compliance with Regulation 1272/2008 and Annex I of the REACH regulation 453/2010.

This safety data sheet provides health and safety information. This product is to be used in applications with best use practice. Individuals handling this product should be informed under COSHH of the recommended safety precautions and should have access to this information. The product information in this data sheet is to the best of our knowledge correct as at the date of publication. Westland Horticulture Limited does not accept responsibility for damage caused by incorrect use of this information.

### Training and related advice:

This document contains important information to ensure the safe storage, handling and use of this product. It is the responsibility of your organisation to ensure that the information contained in this document is communicated to the end user and that all necessary training to enable the product to be used correctly has been given.

For further information please contact Westland Horticulture Ltd, 14 Granville Industrial Estate, Granville Road, Dungannon, County Tyrone, BT70 1NJ.