

Material Safety Data Sheet: GS Iron 6% Plus

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

1.1 Product identifier

Product Name: GS Iron 6% Plus

1.2 Relevant identified uses of the substance or mixture and uses advised against

Liquid fertiliser for use on turf, grass and lawns.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Growing Solutions Ltd

Winterview Farm

Parr Lane

Ecclestone

Chorley

Lancashire

PR7 5RP

United Kingdom

Telephone: +44 (0) 1772 454724

Email: info@growingsolutionsltd.com

1.4 Emergency telephone number:

0870 243 2241 or +44 (0)20 7771 5310 – United Kingdom Poisons Information Centre

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

<u>Hazard Class</u> <u>And Category Code</u>	<u>Hazard</u> <u>Statement Code</u>	<u>Hazard</u> <u>Statement</u>
Eye Damage 1	H318	Causes serious eye damage.
Skin Irritation 2	H315	Causes skin irritation.
Acute Toxicity 1	H302	Harmful if swallowed.
Metal Corrosion 1	H290	May be corrosive to metals.

2.2 Label Elements

Hazard pictograms



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Signal word

Danger

Hazard statements

- H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H400 Very toxic to aquatic life.

Precautionary statements

- P264 Wash possible exposed body surfaces thoroughly after handling this product.
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.
P362 Take off contaminated clothing and wash before reuse.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P102 Keep out of reach of children.
P402 + P404 Store in a dry place. Store in a closed container.

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous ingredient(s):

Description	CAS No.	EC Number	Concentration in mixture
Iron (di) Chloride	7758-94-3	231-843-4	40 – 50% w/w
Manganese Oxide	1344-43-0	215-695-8	<5% w/w
Zinc Sulphate	7733-02-0	231-793-3	<5% w/w
Copper Sulphate	7758-98-7	231-847-6	<5% w/w

4 FIRST AID MEASURES

4.1 Description of first aid measures

- After skin contact:** Immediately rinse with water.
After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing: Induce vomiting and call for medical help.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents:

Water haze

Foam

Carbon dioxide

Fire-extinguishing powder

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear suitable protective clothing, glove and eye/face protection.

6.2 Environmental precautions

Prevent further spillage if safe. Do not allow product to enter sewers / surface or ground water.

6.3 Methods and material for containment and cleaning up

Use mechanical handling equipment.

For large spills: Collect and reuse if possible.

Otherwise: Absorb with inert, absorbent material. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.

6.4 Reference to other sections

See section 8 for information on personal protection equipment.

See section 13 for disposal information.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling: Keep container tightly closed. Use personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapours or spray mist.

Hygiene Measures: Keep away from food, drink and animal feeding stuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands after use. Remove all contaminated clothing immediately.

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7.2 Conditions for safe storage, including any incompatibilities

Storage: Keep only in the original container. Keep away from heat and in a well ventilated place. Store in a cool dry place (store above 5degrees C.). Keep away from food, drink and animal food stuffs. Keep out of reach of children and babies.

Suitable packaging: Plastic UN approved containers.

7.3 Specific end uses

No Information available.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Other occupational exposure limit values: EH40 WEL, Short Term Exposure Limit (STEL), as Fe 2mg/m³
EH40 WEL, Long Term Exposure Limit (TWA), as FE 1mg/m³

8.2 Exposure controls

Appropriate engineering controls: Refer to protective measures listed in sections 7 and 8.

Individual protection measures:

Respiratory protection:	In case of brief exposure or low pollution, use breathing filter apparatus. In case of intensive or pro-longed exposure use self-contained breathing apparatus.
Hand protection:	Protective gloves must be worn. The following materials are suitable; PVC or Nitrile rubber.
Eye protection:	Safety glasses or face shield giving complete protection to the eyes.
Skin / body protection:	Impervious clothing / chemical resistant apron.
Foot protection:	Impervious safety boots.

Environmental exposure controls: **General advice:** Do not flush into surface water or sewer.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Liquid
Colour:	Brownish / Green
Odour:	Slight pickle
Odour Threshold:	No information available.
pH:	1.00
Melting point / Freezing point:	-25 - -15degrees C
Boiling point / Boiling range:	103 – 108degrees C
Flash point:	No information available.
Flammability:	No information available.
Upper explosive limits:	No information available.
Lower explosive limits:	No information available.
Vapour pressure:	No information available.

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Vapour density:	No information available.
Relative density:	1.25 – 1.30
Water solubility:	Soluble
Partition coefficient n-octanol / water:	No information available.
Ignition temperature:	No information available.
Decomposition temperature:	No information available.

Viscosity:	No information available.
Explosivity:	No information available.
Oxidising properties:	No information available.

9.2 Other information

No information available.

10 STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

Metals, Oxidising agents.

10.6 Hazardous decomposition products

Irritant gases / vapours, Toxic gases.

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

Oral:	LD50: > 500mg/kg (rat) Harmful if swallowed.
Inhalation:	No information available.
Dermal:	No information available.

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Irritation:

Skin: Corrosive effects.
Eyes: Corrosive effects.
Sensitisation: No known sensitizing effects.

CMR Effects:

Carcinogenicity: No information available.
Mutagenicity: No information available.
Teratogenicity: No information available.

Reproductive toxicity: No information available.

Specific target organ toxicity:

Single exposure: No information available.
Repeated exposure: No information available.
Aspiration toxicity: No information available.

12 ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic Toxicity: No information available.

12.2 Persistence and degradability

No information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

No information available.

Additional ecological information

General notes: Do not allow product to enter surface water or sewer.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

12.6 Other adverse effects

No information available.

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13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: Disposal together with normal waste is not allowed. Special disposal is required in accordance to local regulations.

Contaminated packaging: Empty contaminated containers thoroughly. They can be recycled after thorough and proper cleaning. Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

14 TRANSPORT INFORMATION

14.1 UN number

UN 3264

14.2 UN proper shipping name

ADR: Corrosive Liquid, Acidic, Inorganic, N.O.S. (Iron (di) Chloride)

RID: Corrosive Liquid, Acidic, Inorganic, N.O.S. (Iron (di) Chloride)

IMDG: Corrosive Liquid, Acidic, Inorganic, N.O.S. (Iron (di) Chloride)

14.3 Transport hazard class (es)

ADR class 8

(Labels; Classification Code; 8; C1; 80; (E)
Hazard identification No;
Tunnel restriction code)

RID class 8

(Labels; Classification Code; 8; C1; 80;
Hazard identification No)

IMDG class 8

(Labels; EmS) 8; F-A, S-B

14.4 Packing group

ADR: III

RID: III

IMDG: III

14.5 Environmental hazards

Labelling according to 5.2.1.8 ADR: No

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Labelling according to 5.2.1.8 RID: No

Labelling according to 5.2.1.6.3 IMDG: No

14.6 Special precautions for user

Not applicable.

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

IMDG: Not applicable.

15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Labeling according to Regulation (EC) No 1272/2008 GHS Label elements

15.2 Chemical safety assessment

No information available.

16 OTHER INFORMATION

Further Information: The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage, transportation, disposal and handling of the material designated and should not be considered a warranty or quality specification. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.