SAFETY DATA SHEET
SOLUBLE IRON

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product name  SOLUBLE IRON
Product number  IPH003/25

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses  Turf hardener and colour enhancer.

1.3. Details of the supplier of the safety data sheet
Supplier  Headland Amenity Ltd
1 Burr Elm Court
Main Street
Caldecote
Cambridge
Cambridgeshire
CB23 7NU
Tel. +44 (0)1223 491090
sds.enquiries@headlandamenity.com

Contact person  Wendy Johnson

1.4. Emergency telephone number
Emergency telephone  +44 (0)1223 491090 (9.00 - 5.00 GMT Mon-Fri)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification (EC 1272/2008)
Physical hazards  Not Classified
Health hazards  Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319
Environmental hazards  Not Classified

2.2. Label elements
Pictogram

Signal word  Warning
Hazard statements  H302 Harmful if swallowed.
                  H315 Causes skin irritation.
                  H319 Causes serious eye irritation.
SOLUBLE IRON

Precautionary statements
P280 Wear protective gloves, protective clothing and eye protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P301+P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/ shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/ attention.

Contains
IRON (II) SULFATE HEPTAHYDRATE

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>CAS number: 7720-78-7</th>
<th>EC number: 231-753-5</th>
<th>REACH registration number: 01-2119513203-57-XXXX</th>
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Classification
Acute Tox. 4 - H302
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319

The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation
Remove person to fresh air and keep comfortable for breathing. Get medical attention if any discomfort continues.

Ingestion
Do not induce vomiting. Get medical attention immediately. Rinse mouth thoroughly with water.

Skin contact
Take off contaminated clothing and wash it before reuse. Wash with plenty of water. Get medical attention if irritation persists after washing.

Eye contact
Promptly wash eyes with plenty of water while lifting the eye lids. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

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

General information
Symptoms of poisoning may occur after several hours. Medical observation for at least 48 hours after the accident is recommended.

Inhalation
Information not available.

Ingestion
Toxic quantities of iron sulphate causes bloody vomiting, hypotension, hyporeflexia, Melena. It can cause constriction of the stomach.

Skin contact
This product is moderately irritating.

Eye contact
Irritating.

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

SECTION 5: Firefighting measures
SOLUBLE IRON

5.1. Extinguishing media

Suitable extinguishing media  Use foam, carbon dioxide, dry powder or water fog to extinguish.

Unsuitable extinguishing media  Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products  Sulphurous gases (SOx).

5.3. Advice for firefighters

Protective actions during firefighting  Containers close to fire should be removed or cooled with water.

Special protective equipment for firefighters  Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions  Provide adequate ventilation. Wear protective clothing and gloves. Avoid generation of dust. Avoid inhalation of dust.

6.2. Environmental precautions

Environmental precautions  Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up  Provide adequate ventilation. Collect and dispose of spillage as indicated in Section 13.

6.4. Reference to other sections

Reference to other sections  For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions  Provide adequate ventilation. Avoid producing and inhaling dust. Avoid contact with skin and eyes.

Advice on general occupational hygiene  Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse. Remove contaminated clothing and protective equipment before entering eating areas. Provide eyewash station.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions  Keep away from alkalis. Keep away from food, drink and animal feeding stuffs. Protect from moisture. This product is hygroscopic.

7.3. Specific end use(s)

Specific end use(s)  The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

8.2. Exposure controls
SOLUBLE IRON

Protective equipment
Eye/face protection  Wear chemical splash goggles.
Hand protection  Wear protective gloves. Neoprene.
Other skin and body protection  Wear protective clothing.

Hygiene measures  Wash hands thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse. Wash contaminated skin thoroughly after handling. Do not eat, drink or smoke when using this product. Provide eyewash station.

Respiratory protection  If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance  Granular powder.
Colour  Green-yellow.
Odour  Sulphur.
Odour threshold  No information available.

pH  ~ 2 @ 20°C
Melting point  64°C
Initial boiling point and range  No information available.
Flash point  Not applicable.
Evaporation rate  No information available.
Evaporation factor  No information available.
Upper/lower flammability or explosive limits  Mixture not classed as flammable or explosive.

Vapour pressure  No information available.
Vapour density  No information available.
Relative density  1.898 g/cm³ @ 20°C
Bulk density  800-900 kg/m³
Solubility(ies)  365 g/l water @ 10°C
Partition coefficient  No information available.
Auto-ignition temperature  No information available.
Decomposition Temperature  No information available.
Viscosity  3 mPa s @ 20°C
Explosive properties  Not considered to be explosive.
Oxidising properties  Does not meet the criteria for classification as oxidising.
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9.2. Other information
Other information
No other relevant information available.

SECTION 10: Stability and reactivity

10.1. Reactivity
Reactivity
Stable under recommended transport or storage conditions.

10.2. Chemical stability
Stability
Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions
Under normal conditions of storage and use, no hazardous reactions will occur. Loss of constitutional water on heating.

10.4. Conditions to avoid
Conditions to avoid
None known.

10.5. Incompatible materials
Materials to avoid
Alkalis.

10.6. Hazardous decomposition products
Hazardous decomposition products
No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity - oral
ATE oral (mg/kg)
1,520.0

Ingestion
Toxic quantities of iron sulphate causes bloody vomiting, hypotension, hyporeflexia, Melena. Can cause constriction of the stomach.

Skin contact
This product is moderately irritating.

Eye contact
Irritating.

SECTION 12: Ecological information

12.1. Toxicity

12.2. Persistence and degradability
Persistence and degradability
No information available.

12.3. Bioaccumulative potential
Bioaccumulative potential
No information available.

Partition coefficient
No information available.

12.4. Mobility in soil
Mobility
The product is soluble in water.

12.5. Results of PBT and vPvB assessment
Results of PBT and vPvB assessment
This product does not contain any substances classified as PBT or vPvB.
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12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number
Not applicable.

14.2. UN proper shipping name
Not applicable.

14.3. Transport hazard class(es)
No transport warning sign required.

14.4. Packing group
Not applicable.

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant No.

14.6. Special precautions for user
Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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


15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 19/05/2016
Revision 4
Supersedes date 04/09/2015
SOLUBLE IRON

Hazard statements in full

H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

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 process. Such information is, to the best of the company’s knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.