

**Section 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

**Product name:** MANGANESE 15

**Product code:** \* UK0009

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

**Use of substance / mixture:** A micronutrient fertiliser for use in agriculture and horticulture.

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

**Company name:** Headland Agrochemicals

Rectors Lane

Pentre

Deeside

Flintshire

CH5 2DH

United Kingdom

**Tel:** +44(0)1244 537370

**Fax:** +44(0)1244 532097

**Email:** [enquiry@headlandgroup.com](mailto:enquiry@headlandgroup.com)

**1.4. Emergency telephone number**

**Emergency tel:** +44(0)1244 537370

(office hours only)

**Section 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Classification under CHIP:** Xn: R48/20/22; N: R51/53

**Classification under CLP:** \* Aquatic Chronic 2: H411; STOT RE 2: H373

**Most important adverse effects:** Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**2.2. Label elements**

**Label elements under CLP:**

**Hazard statements:** \* H373: May cause damage to organs through prolonged or repeated exposure.

H411: Toxic to aquatic life with long lasting effects.

**Signal words:** \* Warning

**Hazard pictograms:** \* GHS08: Health hazard

GHS09: Environmental

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**Precautionary statements:** \* P260: Do not breathe spray.  
P273: Avoid release to the environment.  
P314: Get medical advice/attention if you feel unwell.  
P391: Collect spillage.  
P501: Dispose of contents/container to hazardous waste disposal company/facility.

## Label elements under CHIP:

**Hazard symbols:** Harmful.  
Dangerous for the environment.



**Risk phrases:** R48/20/22: Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.  
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases:** S23: Do not breathe spray.  
S60: This material and its container must be disposed of as hazardous waste.  
S61: Avoid release to the environment. Refer to special instructions / safety data sheets.

## 2.3. Other hazards

**PBT:** This product is not identified as a PBT substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous ingredients:

MANGANESE SULPHATE

EINECS	CAS	CHIP Classification	CLP Classification	Percent
232-089-9	7785-87-7	Xn: R48/20/22; N: R51/53	STOT RE 2: H373; Aquatic Chronic 2: H411	30-50%

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin.  
Drench the affected skin with running water for 10 minutes or longer if substance is still on skin.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.

[cont...]

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**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

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

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

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

**Immediate / special treatment:** \* Show this safety data sheet to the doctor in attendance.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

### 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes.

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Do not attempt to take action without suitable protective clothing - see section 8 of SDS. If outside do not approach from downwind. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

### 6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Refer to section 13 of SDS for suitable method of disposal.

### 6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS. Refer to section 13 of SDS.

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## Section 7: Handling and storage

### 7.1. Precautions for safe handling

**Handling requirements:** Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.  
Do not handle in a confined space. Avoid the formation or spread of mists in the air.

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

**Storage conditions:** Store above 5°C. Keep container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids.

**Suitable packaging:** \* Must only be kept in original packaging.

### 7.3. Specific end use(s)

**Specific end use(s):** No data available.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Workplace exposure limits:** No data available.

### 8.1. DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids.

**Respiratory protection:** Respiratory protection not required.

**Hand protection:** Impermeable gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

**Skin protection:** Impermeable protective clothing.

**Environmental:** \* Refer to specific Member State legislation for requirements under Community environmental legislation.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**State:** Liquid

**Colour:** Pink

**Odour:** Barely perceptible odour

**Oxidising:** \* Non-oxidising (by EC criteria)

**Solubility in water:** Soluble

**Relative density:** approx 1.37

**pH:** approx 4

### 9.2. Other information

**Other information:** No data available.

[cont...]

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## Section 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.  
Decomposition may occur on exposure to conditions or materials listed below.

### 10.4. Conditions to avoid

**Conditions to avoid:** Heat.

### 10.5. Incompatible materials

**Materials to avoid:** \* Strong bases. Strong acids.

### 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

**Hazardous ingredients:**

#### MANGANESE SULPHATE

IVN	RAT	LD50	44100	µg/kg
ORL	MUS	LD50	2330	mg/kg
ORL	RAT	LD50	2150	mg/kg

**Relevant effects for mixture:**

Effect	Route	Basis
Repeated dose toxicity	INH ING	Hazardous: calculated

### Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

[cont...]

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## Section 12: Ecological information

### 12.1. Toxicity

#### \* Ecotoxicity values:

Species	Test	Value	Units
RAINBOW TROUT ( <i>Oncorhynchus mykiss</i> )	96H LC50	9.18	mg/l
ALGAE	72H ErC50	30.4	mg/l
Daphnia magna	48H LC50	28.4	mg/l

### 12.2. Persistence and degradability

**Persistence and degradability:** No data available.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No data available.

### 12.4. Mobility in soil

**Mobility:** \* Soluble in water.

### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT substance.

### 12.6. Other adverse effects

**Other adverse effects:** Toxic to aquatic organisms.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**Recovery operations:** Not applicable.

**Disposal of packaging:** \* Triple rinse, and puncture so packaging cannot be reused, and dispose of as normal industrial waste. Treat the cleaning water following the above method for waste product.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

### 14.1. UN number

**UN number:** UN3082

### 14.2. UN proper shipping name

**Shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(MANGANESE SULPHATE)

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## 14.3. Transport hazard class(es)

Transport class: 9

## 14.4. Packing group

Packing group: III

## 14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: No

## 14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 3

## 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk: The product is not transported in bulk tankers.

## Section 15: Regulatory information

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

Specific regulations: Not applicable.

### 15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

## Section 16: Other information

### Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and 3:** H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H411: Toxic to aquatic life with long lasting effects.

R48/20/22: Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.