



SAFETY DATA SHEET

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 453/2010

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier	
Product Name	Manganese Sulphate
Trade Name	
CAS No.	10034-96-5
EINECS No.	232-089-9
REACH Registration No.	None assigned.
1.2 Relevant identified uses of the substance or mixture and uses advised against	
Identified use(s)	Agricultural use
Uses advised against	None known.
1.3 Details of the supplier of the Safety Data Sheet	
Company Identification	Fielder(UK)Ltd The Paddocks Longden Shrewsbury SY5 8EX
Telephone	+44 (0) 1743 860924
Fax	None.
E-Mail (competent person)	fielderag@farming.co.uk
1.4 Emergency telephone number	
Emergency Phone No.	None.

2. SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture**
Manganese and its compounds can cause central nervous system and pulmonary system damage by inhalation of fumes and if swallowed.

Regulation (EC) No. 1272/2008 (CLP)

Signal Word

Danger

Physical Not classified

Health STOT rep 2 –H373

Environment Aquatic chronic 2 H411

Eye Damage H318

2.2 Label elements

Product Name

According to Regulation (EC) No. 1272/2008 (CLP)

Hazard pictogram(s)

Manganese Sulphate



GHS05



GHS08



GHS09

Signal word(s)

Danger.

Hazard statement(s)

H318 Causes serious eye damage

H373 May damage organs through prolonged or repeated exposure

H411 Toxic to aquatic life with long-lasting effects

Precautionary statement(s)

P273: Avoid release to the environment.
 P260: Do not breathe dust/fume/mist/vapours/spray.
 P280: Wear Protective clothing and eye/face protection
 P310: Immediately contact a poison centre or doctor
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P501 Dispose of contents and container according to legislation.
 None.
 For full text of H/P statements see section 16.

2.3 Other hazards

2.4 Additional Information

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

EC Classification No. 1272/2008

Hazardous ingredient(s)	%W/W	CAS No.	EC No.	Hazard pictogram(s) and Hazard statement(s)
Manganese Sulphate	100	10034-96-5	232-089-9	GHS07, H315 Skin Irritant Eye Irrit. 2; H319, STOT SE 3; H336

3.2 Additional Information

For full text of H/P statements see section 16.

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

General advice: Remove to fresh air. Drink plenty of water.
 Obtain medical attention
 Manganese and its compounds can cause central nervous system and pulmonary system damage by inhalation of fumes. If not breathing give artificial respiration. If breathing is difficult give oxygen. Seek medical attention immediately.

Skin Contact

Rinse skin with soap and water/shower. If skin irritation occurs: Get medical advice/attention.

Eye Contact

Rinse immediately with plenty of water, including under the eyelids for at least 15 minutes. If eye irritation persists seek medical advice.

Ingestion

If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: Cough, Headache, dizziness, nausea and vomiting.

Skin/Eye Contact: Redness, Pain.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.



5. SECTION 5: FIRE-FIGHTING MEASURES

Non-flammable. May release irritant fumes in event of fire.

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|--|--------------------------------|---|
| 5.1 Extinguishing Media | Suitable Extinguishing Media | In case of fire: Extinguish preferably with dry chemical, foam or waterspray. |
| | Unsuitable Extinguishing Media | None known |
| 5.2 Special hazards arising from the substance or mixture | | |
| 5.3 Protection | | Wear self contained breathing apparatus |

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

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| 6.1 Personal precautions, protective equipment and emergency procedures | | Avoid contact with skin, eyes and clothing. Wear goggles to protect eyes and personal protective equipment |
| 6.2 Environmental precautions | | Control and contain spillage. Avoid release to the environment. |
| 6.3 Methods and material for containment and cleaning up | | Recover and store in suitable containers. Wash spillage area clean with plenty of water Contact waste disposal services. |
| 6.4 Reference to other sections | | See Also Section: 8, 13. |

7. SECTION 7: HANDLING AND STORAGE

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|---|------------------------|--|
| 7.1 Precautions for safe handling | | Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Wash thoroughly after use. Wear personal protective clothing Due care must be taken and any damaged packages isolated and repaired |
| 7.2 Conditions for safe storage, including any incompatibilities | | Keep containers closed and in a cool dry place. Store out of the reach of children. Keep away from foodstuffs. Ensure store is well ventilated |
| | Storage Temperature | Not available |
| | Storage Life | Not available |
| | Incompatible materials | Aluminium, copper, zinc and alloys containing these materials |
| 7.3 Specific end use(s) | | Not available |

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION


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|---|--|------------------------------|
| 8.1 Control parameters | | Not available |
| 8.1.1 Occupational Exposure Limits | | MEL LTEL (8hr TWA): 0.5mg.m3 |

MDHS 91

Source: WEL: Workplace Exposure Limit (UK HSE EH40)

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|-------------------------------------|--|---------------|
| 8.1.2 Biological limit value | | Not available |
| 8.1.3 PNECs and DNELs | | Not available |
| 8.2 Exposure controls | | Not available |



8.2.1 Appropriate engineering controls	COSHH Due consideration should be given to your control systems and the need for assessment
8.2.2 Personal protection equipment	
Eye/face protection	Wear protective goggles.
	
Hand Protection	Wear suitable gloves.
Skin protection	Wash hands after handling product. Wear adequate protective clothing to avoid skin contact.
Thermal hazards	Not available
8.2.3 Environmental Exposure Controls	Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	
Appearance	Powder
Colour	Pale pink
Odour	Odourless
Odour Threshold	Not available.
pH	Not available.
Melting Point/Freezing Point	Not available.
Initial boiling point and boiling range	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not determined
Vapour density	Not determined
Relative density	Not available
Solubility(ies)	Highly soluble
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available.
Decomposition Temperature	Not applicable.
Viscosity	Not applicable.
Explosive properties	Not available
Oxidising properties	Not available
9.2 Other information	Specific gravity: 1.35

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Not available
10.2 Chemical stability	Stable under normal conditions. Thermally very stable
10.3 Possibility of hazardous reactions	May form explosive mixture with air particularly in enclosed spaces.
10.4 Conditions to avoid	Not available
10.5 Incompatible materials	Can react with strong acids, strong oxidizing agents and powdered metals. May react violently with hydrogen peroxide
10.6 Hazardous Decomposition Product(s)	Sulphur dioxide / trioxide, oxides of manganese

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects	
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Mixture	
Acute toxicity	
Inhalation	May cause irritation of the respiratory tract and mucous membranes.
Irritation	Skin contact: May cause skin irritation and/or dermatitis. Low hazard for usual industrial handling Eye contact: May irritate eyes.
Corrosivity	Not available
Sensitisation	Not available
STOT - single exposure	Not available
Repeated dose toxicity	Not available
Carcinogenicity	Not classified.
Mutagenicity	Not classified.
Toxicity for reproduction	None anticipated.
11.2 Other information	Chronic Inhalation or ingestion may result in non-specific neurological symptoms of headache, apathy and weakness of legs, followed by psychosis and neurological symptoms similar to those of Parkinsons disease. In its acute form manganese poisoning has an effect characteristic of other heavy metals, leading to "metal fume fever" if dust is inhaled in sufficient quantity. An airborne concentration thought to be immediately dangerous to life or health is in the order of 10,000mg,m3(as manganese)Chronic manganese poisoning is a clearly characterised disease.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	Aquatic toxicity: Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment
12.2 Persistence and degradability	Not available
12.3 Bioaccumulative potential	Not available
12.4 Mobility in soil	Not available
12.5 Results of PBT and VPVB assessment	Not available
12.6 Other adverse effects	Not available

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	Disposal Method: Disposal should be in accordance with local authority regulations Waste: Send to a registered waste disposal site. Packaging: Labels should not be removed from containers until they have been cleaned
13.2 Additional Information	None.

14. SECTION 14: TRANSPORT INFORMATION

14.1 UN number	UN 3077
14.2 UN Proper Shipping Name	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,



14.3 Transport hazard class(es)	SOLID NOS. (Manganese sulphate) 9, III, ADR Class 9: Miscellaneous Dangerous substances and Articles
	Hazard ID Number: 90
	Emergency Action Code: 2X
14.4 Packing Group	III
14.5 Environmental hazards	Not available
14.6 Special precautions for user	Not available
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not available

15. SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.
15.1.1 EU regulations	
Authorisations and/or restrictions on use	
Candidate List of Substances of Very High Concern for Authorisation	All chemicals are not listed.
REACH: Annex XIV List of substances subject to authorization	All chemicals are not listed.
REACH: ANNEX XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	All chemicals are not listed.
Community Rolling Action Plan (CoRAP); Draft 04/11/2013	All chemicals are not listed.
15.1.2 National regulations	None.
15.2 Chemical Safety Assessment	Not available.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Hazard statement(s) and Precautionary statement(s)

H318	Causes serious eye damage.
H373	May damage organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long-lasting effects.
P273	Avoid release to the environment.
P260	Do not breathe vapour.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P310	Immediately contact a poison centre or doctor.
P305+P351+	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
P338	Continue rinsing.
P501	Dispose of contents/container to: Suitable incineration plant.

Hazard pictogram(s)

GHS02



GHS08



GHS07



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Annex to the extended Safety Data Sheet (eSDS)

No information available.