

SAFETY DATA SHEET

MANGANESE EDTA

This safety data sheet complies with the requirements of:
Regulation (EC) No. 453/2010 and Regulation (EC) No. 1272/2008



SDS # : 10013-A
Revision date: 2018-07-23
Format: EU
Version 1.02

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Code(s) 10013-A
Product Name MANGANESE EDTA
REACH registration number 01-2119493600-40-XXXX
EC-No 239-407-5
CAS-No 15375-84-5

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

Recommended Use: A soluble fertilizer for use in agriculture and horticulture
Restrictions on use Use as recommended by the label.

1.3. Details of the supplier of the safety data sheet

Supplier FMC Agro Limited
Rectors Lane
Pentre
Flintshire
CH5 2DH
United Kingdom
Tel: + 44 (0) 1244 537370
E-mail: fmc.agro.uk@fmc.com

For further information, please contact:

Contact point Tel: +44(0)1244 537370
Email: fmc.agro.uk@fmc.com

1.4. Emergency telephone number

Emergency telephone Tel: +44(0)1244 537370 (Office hours only)

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture Regulation (EC) No 1272/2008

This product has no classification under CLP
This product has no label elements.
Hazard symbol not required.

2.2. Label elements

Hazard pictograms
This product has no classification under CLP

This product has no label elements.
Hazard symbol not required.

2.3. Other hazards

This product is not identified as a PBT/vPvB substance.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical identity of the substance: MANGANESE DISODIUM EDTA

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact	Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Call a doctor if irritation persists.
Skin Contact	Wash off immediately with soap and plenty of water. If symptoms persist, call a doctor.
Inhalation	Remove person from exposure ensuring one's own safety while doing so. If symptoms persist, call a doctor.
Ingestion	Rinse mouth. Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention. If vomiting does occur, rinse mouth and drink fluids again.

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

Most important symptoms and effects, both acute and delayed	Skin contact: May see mild irritation at the site of contact. Eye contact: Possible irritation and redness. Ingestion: Possible irritation of the throat. Inhalation: May experience irritation of the throat with a feeling of tightness in the chest. Delayed/Immediate effects: Immediate effects can be expected after short-term exposure.
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4.3. Indication of any immediate medical attention and special treatment needed

Indication of immediate medical attention and special treatment needed, if necessary	Eye bathing equipment should be available on the premises. Show this safety data sheet to the doctor in attendance.
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Section 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Cool containers / tanks with water spray.

Unsuitable extinguishing media

No information available

5.2. Special hazards arising from the substance or mixture

Toxic fumes may be released in fire situations.

**Hazardous Combustion
Products**Carbon oxides, Nitrogen oxides (NO_x).**5.3. Advice for firefighters**

As in any fire, wear self-contained breathing apparatus and full protective gear. 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**

For personal protection see section 8. Stop leak if you can do it without risk. Avoid dust formation. In case of spill, avoid contact. Isolate area and keep out animals and unprotected persons. Keep people away from and upwind of spill/leak. In the case of large spills (1 ton or more), alert the appropriate authorities.

For further clean-up instructions, call Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up**Methods for Containment**

Cover powder spill with plastic sheet or tarp to minimise spreading.

Methods for cleaning up

Use industrial vacuum cleaner to remove material. Transfer to a closable, labeled 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

See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE**7.1. Precautions for safe handling****Handling**

Use only in area provided with appropriate exhaust ventilation. Avoid dust formation.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities**Storage**

Keep in a dry, cool and well-ventilated place. Keep away from direct sunlight. Keep out of reach of children and animals. Keep away from food, drink and animal feedingstuffs. Avoid contact with water or humidity.

7.3. Specific end use(s)**Specific Use(s)**

No data available.

Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/Face Protection Safety glasses with side-shields. Provide emergency on-site eyewash.

Hand Protection Protective gloves. Impervious butyl rubber gloves. Wear chemical protective gloves made of materials such as nitrile or neoprene.

Skin and Body Protection Wear protective gloves/clothing.

Respiratory Protection The product is not likely to present an airborne exposure concern during normal handling, but in the event of a discharge of the material which produces a heavy dust, workers should put on officially approved face mask or respiratory protection.

Environmental exposure controls 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

Physical State	Dry powder
Appearance	No information available
Odour	Barely perceptible
Colour	Light pink
Odour threshold	No information available
pH	6.0 - 7.0 (1% solution)
Melting point/freezing point	No information available
Boiling point/boiling range	No information available
Flash point	No information available
Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit	No information available
Vapour pressure	No information available
Vapour density	No information available
Specific gravity	0.6 - 0.8 g/cm ³
Water solubility	Soluble in water
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidising properties	Non-oxidizing (by EC criteria)

9.2. Other information

Softening point	No information available
Molecular weight	No information available
VOC content (%)	No information available
Density	No information available
Bulk density	No information available

K_{st} No information available**Section 10: STABILITY AND REACTIVITY****10.1. Reactivity**

None under normal use conditions

10.2. Chemical stability

Stable under recommended storage conditions.

Explosion data**Sensitivity to Mechanical Impact** No information available.**Sensitivity to Static Discharge** No information available.**10.3. Possibility of hazardous reactions****Hazardous polymerisation**

Hazardous polymerization does not occur.

Hazardous reactions

None under normal processing. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

Strong oxidising agents, Strong acids.

10.6. Hazardous decomposition products

May emit toxic fumes under fire conditions. See Section 5.2 for more information.

Section 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Acute toxicity****Product Information**

LD50 Oral	> 2000 mg/kg (rat)
Inhalation LC50	> 5.16 mg/l 4 hr (rat)

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Sensitisation	No information available.
Mutagenicity	No information available.
Carcinogenicity	No information available.

Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.

Symptoms	Skin contact: May see mild irritation at the site of contact.
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Eye contact: Possible irritation and redness.

Ingestion: Possible irritation of the throat.

Inhalation: May experience irritation of the throat with a feeling of tightness in the chest.

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

Aspiration hazard

No information available.

Section 12: ECOLOGICAL INFORMATION**12.1. Toxicity**

There is no data available for this product.

12.2. Persistence and degradability

Slightly biodegradable.

12.3. Bioaccumulative potential

The substance has a low potential to bioaccumulate in the environment.

12.4. Mobility in soil**Mobility in soil**

No information available.

12.5. Results of PBT and vPvB assessment

This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods****Waste from residues / unused products**

Transfer to a suitable container and arrange for collection by specialised disposal company. Do not contaminate ponds, waterways or ditches with chemical or used containers. Do not discharge to sewer systems.

Contaminated Packaging

Clean container with water. Dispose of rinse water in accordance with local and national guidelines. Empty containers should be taken to an approved waste handling site for recycling or disposal.

EWC Waste Disposal No

02 01 09

OTHER INFORMATION

NOTE : The user's attention is drawn to the possible existence of specific European, national or local regulations regarding disposal.

Section 14: TRANSPORT INFORMATION

NOTE

NOT CLASSIFIED AS DANGEROUS IN THE MEANING OF TRANSPORT REGULATIONS.

IMDG/IMO

14.1 UN/ID no	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard class	Not regulated
14.4 Packing Group	Not regulated
14.5 Marine Pollutant	Not applicable
14.6 Special Provisions	None
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code	The product is not transported in bulk tankers.

RID

14.1 UN/ID no	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental Hazard	Not applicable
14.6 Special Provisions	None

ADR/RID

14.1 UN/ID no	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental Hazard	Not applicable
14.6 Special Provisions	None

ICAO/IATA

14.1 UN/ID no	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental Hazard	Not applicable
14.6 Special Provisions	None

Section 15: REGULATORY INFORMATION

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

National regulations Not applicable

European Union**Authorisations and/or restrictions on use:**

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not Applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not Applicable

International Inventories

15.2. 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**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of R-phrases referred to under sections 2 and 3**

Not applicable

Legend

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS:	CAS (Chemical Abstracts Service)
Ceiling:	Maximum limit value:
DNEL:	Derived No Effect Level (DNEL)
EINECS:	EINECS (European Inventory of Existing Chemical Substances)
GHS:	Globally Harmonised System (GHS)
IATA:	International Air Transport Association (IATA)
ICAO:	International Civil Aviation Organization
IMDG:	International Maritime Dangerous Goods (IMDG)
LC50:	LC50 (lethal concentration)
LD50:	LD50 (lethal dose)
PBT:	Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
RID:	Regulations Concerning the International Transport of Dangerous Goods by Rail
STEL:	Short term exposure limit
SVHC	SVHC: Substances of Very High Concern for Authorisation:

TWA:	time weighted average
vPvB:	very Persistent and very Bioaccumulative

Revision date: 2018-07-23

Reason for revision: Format Change.

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.

Prepared By

FMC Corporation

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End of Safety Data Sheet