

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)



MANGANESE

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

1.1 Product identifier.

Product Name: MANGANESE
CAS: 7439-96-5
CE: 231-105-1
Index: No aplicable
REACH: 01-2119449803-34-XXXX

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

Not available.

1.3 Details of the supplier of the safety data sheet.

Company: **ALDEBARÁN SISTEMAS SL**
Address: C/Jerónimo Zurita, 10, entlo izda, 50001
City: Zaragoza
Province: Zaragoza
Telephone: 0034976796134
E-mail: aldebaran@aldebaransistemas.com

1.4 Emergency telephone number: 0034915620420 (Available 24 hours)

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the mixture.

The product is not classified as hazardous within the meaning of Regulation (EU) No 1272/2008.

2.2 Label elements.

The product is not classified as hazardous within the meaning of Regulation (EU) No 1272/2008.

2.3 Other hazards.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

The product does not contain substances which represent a health or environmental hazard according to Annex II of Regulation (EC) No. 1907/2006

3.2 Mixtures.

Not Applicable.

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

Due to the composition and type of the substances present in the product, no particular warnings are necessary.

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Inhalation.

Place the victim in the open air, keep him warm and at rest, if breathing is irregular or stops, practice artificial respiration. Do not administer anything oral way. If you are unconscious, put him in an appropriate position and seek medical help.

Eye contact.

In case of wearing contact lenses, remove them. Wash your eyes thoroughly with clean, fresh water for at least 10 minutes, pulling the eyelids up and seek medical attention.

Skin contact.

Remove contaminated clothing. Wash the skin vigorously with soap and water or a suitable skin cleanser. NEVER use solvents or thinners.

Ingestion.

If accidentally swallowed, seek immediate medical attention. Keep him at rest. NEVER cause vomiting.

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

No known acute or delayed effects from exposure to the product.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

SECTION 5: FIREFIGHTING MEASURES.

5.1 Extinguishing media.

Suitable extinguishing media:

Use class D extinguisher.

Unsuitable extinguishing media

Do not use a direct stream of water or CO₂ to extinguish.

5.2 Special hazards arising from the mixture.

Fire can produce metallic oxides

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Product not classified as dangerous to the environment. Avoid the contamination of drains, surface or underground water, as well as soil.

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6.3 Methods and material for containment and cleaning up.

Collect spills with an adequate suction system.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

The product does not require special handling measures, the following general measures are recommended:

For personal protection, see section 8. Never use pressure to empty the containers. They are not pressure-resistant containers.

In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety.

Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store according to local legislation. Observe the indications of the tag. Store containers between 5 and 35 °C, in a dry and well-ventilated place, away from sources of heat and direct sunlight. Keep away from ignition points. Keep away from strongly acidic or alkaline materials. No Smoking. Send the invite to unauthorized people.

7.3 Specific end use(s).

Except for the indications already specified, it is not necessary to make any special recommendation regarding the uses of this product..

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

Name	DNEL/DMEL	Type	Value
manganese CAS No: 7439-96-5 EC No: 231-105-1	DNEL (Workers)	Inhalation, Long-term, Systemic effects	0,2 (mg/m ³)

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.

DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

8.2 Exposure controls.

As a preventive measure, the use of basic personal protection equipment is recommended, with the corresponding "CE marking" according to R.D. 1407/192 and subsequent amendments. For more information on personal protection equipment (storage, use, cleaning, maintenance, protection class, ...) consult the information leaflet provided by the EPI manufacturer. The indications contained in this point refer to the pure product. The protection measures for the diluted product may vary depending on its degree of dilution, use, method of application, etc. To determine the obligation of installation of emergency showers and / or eyewash in the warehouses, the regulations regarding the storage of chemical products applicable in each case will be taken into account. For more information see sections 7.1 and 7.2

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Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %
Uses:	
Breathing protection:	
Local ventilation may be necessary to control exposure to dust. Such control methods must take precedence over the use of respiratory equipment. If not used, a dust mask with a suitable filter may be required. The most expensive type and filter depend on dust concentrations.	
Hand protection:	
PPE:	Protective gloves against chemicals.
Characteristics:	«CE» marking, category III.
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.
Eye protection:	
PPE:	Protective goggles against particle impacts.
Characteristics:	«CE» marking, category II. Eye protector against dust and smoke.
CEN standards:	EN 165, EN 166, EN 167, EN 168
Maintenance:	Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions.
Observations:	Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc.
Skin protection:	
PPE:	Anti-static protective clothing.
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.
CEN standards:	EN 340
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.
Observations:	The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.
PPE:	Anti-static safety footwear.
Characteristics:	«CE» marking, category II.
CEN standards:	EN ISO 13287, EN 20347
Maintenance:	The footwear should be checked regularly
Observations:	The level of comfort during use and acceptability are factors that are assessed very differently depending on the user. Therefore, it is advisable to try on different footwear models and, if possible, different widths.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance: N.A./N.A.
Colour: Grey
Odour: Odourless
Odour threshold: N.A./N.A.
pH: N.A./N.A.
Melting point: 650-1245 °C
Boiling Point: >300 °C
Flash point: N.A./N.A.
Evaporation rate: N.A./N.A.
Inflammability (solid, gas): N.A./N.A.
Lower Explosive Limit: N.A./N.A.
Upper Explosive Limit: N.A./N.A.
Vapour pressure: N.A./N.A.
Vapour density: N.A./N.A.
Relative density: 3,7-5,5, g/cm³
Solubility: Insoluble en agua
Liposolubility: N.A./N.A.
Hydrosolubility: N.A./N.A.
Partition coefficient (n-octanol/water): N.A./N.A.
Auto-ignition temperature: N.A./N.A.
Decomposition temperature: N.A./N.A.
Viscosity: N.A./N.A.
Explosive properties: No explosive
Oxidizing properties: N.A./N.A.
N.A./N.A. = Not Available/Not Applicable due to the nature of the product

9.2 Other information.

Pour point: N.A./N.A.
Blink: N.A./N.A.
Kinematic viscosity: N.A./N.A.
N.A./N.A. = Not Available/Not Applicable due to the nature of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

Hazardous reactions are not expected if the technical instructions for the storage of chemical products are met. See section 7.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions (see section 7).

10.3 Possibility of hazardous reactions.

During storage and handling avoid the generation of fine particles, which could react with oxygen / air and cause fire.

10.4 Conditions to avoid.

In the absence of organic atoms and covalent bonds, the substance is stable at ambient temperature and normal pressure.

10.5 Incompatible materials.

Does not apply

10.6 Hazardous decomposition products.

Non-hazardous decomposition products are generated when contact with water. At extreme temperatures it can generate metal oxides and / or dangerous fumes.

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SECTION 11: TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects.

No data available on product tested.

11.2 Acute toxicity;

According to OECD studies they indicate that it does not apply

11.3 Sensitization

According to OECD studies they indicate that it does not apply

11.4 Chronic health effects

Does not apply

11.5 Carcinogenicity, mutagenicity and toxic effects on reproduction (CMR)

Does not apply

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

According to OECD studies they indicate that it does not apply

12.2 Persistence and degradability.

Does not apply to inorganic substances

12.3 Bioaccumulative potential.

Does not apply

12.4 Mobility in soil.

No information is available about the mobility in soil.
The product must not be allowed to go into sewers or waterways.
Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13 DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.
Follow the provisions of Directive 2008/98/EC regarding waste management.

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SECTION 14: TRANSPORT INFORMATION.

Transportation is not dangerous. In case of road accident causing the product's spillage, proceed in accordance with point 6.

14.1 UN number.

Transportation is not dangerous.

14.2 UN proper shipping name.

Description:

ADR: Transportation is not dangerous.

IMDG: Transportation is not dangerous.

ICAO/IATA: Transportation is not dangerous.

14.3 Transport hazard class(es).

Transportation is not dangerous.

14.4 Packing group.

Transportation is not dangerous.

14.5 Environmental hazards.

Transportation is not dangerous.

14.6 Special precautions for user.

Transportation is not dangerous.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.

Transportation is not dangerous.

SECTION 15: REGULATORY INFORMATION.

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

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

The product is not affected by Directive 2012/18/EU (SEVESO III).

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

Does not apply

SECTION 16: OTHER INFORMATION.

Complete text of the H phrases that appear in section 3:

H225 Highly flammable liquid and vapour.

Classification codes:

Flam. Liq. 2 : Flammable liquid, Category 2

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It is recommended that the product only be employed for the purposes advised.

Abbreviations and acronyms used:

CEN: European Committee for Standardization.

DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.

PPE: Personal protection equipment.

Key literature references and sources for data:

<http://eur-lex.europa.eu/homepage.html>

<http://echa.europa.eu/>

Regulation (EU) 2015/830.

Regulation (EC) No 1907/2006.

Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.