

大连星镁矿业有限公司

STAR GRACE MINING CO., LTD.

Add: 29-67, No. 929, Xinan Road, Shahekou District, Dalian, Liaoning, China

Material Safety Data Sheet

Manganese Sulphate

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

Product identifier

Product Name Manganese Sulphate
Cas No.: 10034-96-5

Other means of identification

Synonyms Manganese (II) sulphate

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory chemicals, manufacture of substances
Uses advised against No information available

Details of the supplier of the safety data sheet

Exporter STAR GRACE MINING CO., LIMITED
Address 29-67, No. 929, XINAN ROAD, SHAHEKOU DISTRICT, DALIAN, LIAONING, CHINA
Supplier Phone Number: +86041162672278
Contact Phone: +86041162631121
E-mail maggiewang@magnesium-fertilizer.com

Emergency telephone number +86041162672278

2. HAZARDS IDENTIFICATION

GHS Classification

Not classified

Label elements

Symbols/Pictograms None
Signal word None
Hazard Statements Not classified
Precautionary Statements Wash skin thoroughly after handling.
Do not eat, drink, or smoke when using this product.
Wear protective gloves/eye protection/face protection
IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Get medical advice/ attention.
IF ON SKIN: Wash with plenty of soap and water. Get medical advice/ attention.

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/ attention.
Disposal approved waste disposal plant

Hazards not otherwise classified (HNOC)

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical nature</u>	Substance	CAS No	Weight-%
Chemical Name			
Manganese Sulphate Monohydrate		10034-96-5	≥98.0

4. FIRST AID MEASURES

Description of first aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation Remove from exposure area to fresh air immediately. If breathing is difficult, oxygen may be administered by a qualified operator. Keep person warm and at rest. Get medical attention for irritation or any other symptom.

Skin Contact Remove contaminated clothing and shoes. Wash affected area with soap or mild detergent and rinse with water until no evidence of product remains. Get medical assistance for irritation, or any other symptom.

Eye contact Flush eyes immediately with large amounts of water or normal saline solution, occasionally lifting upper and lower lids until no evidence of product remains (approximately 15-20 minutes). Cover with sterile bandages. Get medical attention immediately.

Ingestion In patients not in shock or coma, induce emesis with syrup of Ipecac if vomiting has not occurred. Follow with gastric lavage using Deferoxamine, 2 grams in 1 liter of water which contains sodium bicarbonate 20 gm/L. Leave 10 grams of deferoxamine in 50 ml of 5% sodium bicarbonate in the stomach. Maintain airway, blood pressure, and respiration.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see Section 2.2) and/or in Section 11.

Indication of any immediate medical attention and special treatment needed

No data available.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information: The product itself does not burn.

Specific hazards arising from the chemical

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Sulphur oxides, manganese oxides.

Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas
Ensure adequate ventilation, especially in confined areas
Remove all sources of ignition
Use personal protection recommended in Section 8
Avoid breathing vapors or mists

Methods and material for containment and cleaning up

Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

7. HANDLING AND STORAGE

Precautions for safe handling

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see Section 8.

Environmental precautions, Methods and materials for containment and cleaning up

Do not let product enter drains. Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical Name	U.S.A ACGIH TLV	OSHA PEL	NIOSH IDLH	Denmark	European Union
Manganese Sulphate Monohydrate	TWA: 0.2mg/m ³	TWA: 1 mg/m ³	-	-	-
Chemical Name	Latvia	France	Finland	Germany	Italy
Manganese Sulphate Monohydrate	-	-	-	-	-
Chemical Name	Norway	United Kingdom	Australia	Austria	Belgium
Manganese Sulphate Monohydrate	-	-	-	-	-

Appropriate engineering controls

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If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter.

Individual protection measures, such as personal protective equipment

Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Hand Protection	Wear protective gloves.
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Solid
Appearance	Pale pink granular or powder.
Odor	Odorless.
Odor Threshold	Not determined
pH	No information found.
Melting point/freezing point	700C (1292F) Loses all water @ 400-500C
Boiling point / boiling range	850C (1562F) Decomposes.
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Flammability Limit in Air	No data available
Vapor Pressure	No data available
Vapor density	No data available
Density	2.95
Relative density	No data available
Bulk density	No data available
Specific gravity	No data available
Water solubility	No data available
Partition coefficient (LogPow)	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Kinematic viscosity	No data available
Dynamic viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

Other information

Bulk density: 1,100 kg/m³

10. STABILITY AND REACTIVITY

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Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Will not occur

Conditions to avoid

Incompatibles

Incompatible materials

Strong oxidizing agents.

Hazardous Decomposition Products

Oxides of sulfur and the contained metal.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	No data available
Eye contact	No data available
Skin Contact	No data available
Ingestion	Harmful if swallowed

Skin corrosion/irritation

Non-irritating to the skin

Serious eye damage/eye irritation

No eye irritation

Sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

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STOT - repeated exposure

No data available

Aspiration hazard

No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT

UN/ID No.	N/A
Proper shipping name	Not regulated
Hazard Class	N/A
Packing Group	Not regulated
Special precautions	No data available
Marine pollutant	None

15. REGULATORY INFORMATION

International Inventories

TSCA: CAS# 10034-96-5 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS# 10034-96-5 for the anhydrous form is on the inventory (40CFR720.3(u)(2)). CAS# 10034-96-5 is listed on the TSCA Inventory.

US Federal Regulations

SARA 313

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This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA + Title III, Section 313.

DSL: CAS# 10034-96-5 is listed on Canada's DSL List.

SARA 311/312 Hazard Categories

No data available

CWA (Clean Water Act)

No data available

CERCLA

(40 CFR 302.4) Manganese Sulphate Monohydrate Reportable quantity: 1000 lbs.

US State Regulations

California Proposition 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

U.S. State Right-to-Know Regulations

Manganese Sulphate Monohydrate CAS-No.10034-96-5

NFPA Ratings:

Health: 1, Flammability:2, Reactivity: 0

HMIS Rating:

Health hazard: Warning! harmful if swallowed or inhaled. affects lungs, central nervous system, blood and kidneys. may cause irritation to skin, eyes, and respiratory tract.

16. OTHER INFORMATION

Further information

This SDS summarizes to the best of our knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since CHEMLAND CHEMICALS CO.,LTD .cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. CHEMLAND CHEMICALS CO.,LTD, and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.chemlandgroup.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Product Use: Feed ingredient additive, fertilizer additive.

Issuing Date New

Revision Date 1,Jan-2020

Revision 1

----- End of Safety Data Sheet -----

STAR GRACE MINING CO., LTD.
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Wang Xiu Ling