

# SAFETY DATA SHEET

## Manganese sulfate Monohydrate

Jiangsu Kolod Food Ingredients Co., Ltd.

# SDS

- According to GHS (Sixth Revised Edition)

### Section 1 Product and Company Identification

#### > Product Identifier

Product Name	Manganese sulfate Monohydrate
Synonyms	-
CAS No.	10034-96-5
EC No.	231-960-0
Molecular Formula	MnSO4·H2O

#### > Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Relevant Identified Uses	Please consult manufacturer.
Uses Advised Against	Please consult manufacturer.

#### > Details of the Supplier of the Safety Data Sheet

Applicant Name	Jiangsu Kolod Food Ingredients Co., Ltd.
Application Address	GUANYUN DEVELOPING ZONE, LIANYUNGANG CITY, JIANGSU PROVINCE, CHINA
Applicant Post Code	222000
Applicant Telephone	+86-518-85110538
Applicant Fax	+86-518-85112903
Applicant E-mail	sales3239@jskolod.com
Manufacturer Name	Jiangsu Kolod Food Ingredients Co., Ltd.
Manufacturer Address	GUANYUN DEVELOPING ZONE, LIANYUNGANG CITY, JIANGSU PROVINCE, CHINA
Manufacturer Post Code	222000
Manufacturer Telephone	+86-518-85110538
Manufacturer Fax	+86-518-85112903
Manufacturer E-mail	sales3239@jskolod.com

#### > Emergency Phone Number

Emergency Phone Number	+86-518-85110538
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### Section 2 Hazards Identification

Hazard class and label elements of the product according to GHS (the sixth revised edition):

#### > GHS Hazard Class

<b>Specific Target Organ Toxicity (Repeated Exposure)</b>	Category 2
<b>Hazardous To The Aquatic Environment – Long-Term (Chronic) Hazard</b>	Category 2

**> GHS Label Elements**

Pictogram



Signal Word

**Warning****> Hazard Statements**

H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects

**> Precautionary Statements**

Prevention

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.

Response

P314	Get medical advice/attention if you feel unwell.
P391	Collect spillage.

Storage

Not applicable

Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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### Section 3 Composition/Information on Ingredients

Component	Concentration (weight percent, %)	CAS No.	EC No.
Manganese (II) Sulfate Monohydrate	> 98.0	10034-96-5	231-960-0

### Section 4 First Aid Measures

**> Description of First Aid Measures**

<b>General Advice</b>	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
<b>Skin Contact</b>	Take off contaminated clothing and shoes immediately. Wash off with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
<b>Ingestion</b>	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
<b>Inhalation</b>	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.

**Protecting of First-aiders** Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

**> Most Important Symptoms and Effects, both Acute and Delayed**

- 1 Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

**> Indication of Any Immediate Medical Attention and Special Treatment Needed**

- 1 Treat symptomatically.
- 2 Symptoms may be delayed.

## Section 5 Fire Fighting Measures

**> Extinguishing Media**

**Suitable Extinguishing Media** Dry chemical, carbon dioxide or alcohol-resistant foam.

**Unsuitable Extinguishing Media** Do not use a solid water stream as it may scatter or spread fire.

**> Specific Hazards Arising from the Substance or Mixture**

- 1 Containers may explode when heated.
- 2 Fire exposed containers may vent contents through pressure relief valves.
- 3 May expansion or decompose explosively when heated or involved in fire.

**> Advice for Firefighters**

- 1 As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
- 2 Fight fire from a safe distance, with adequate cover.
- 3 Prevent fire extinguishing water from contaminating surface water or the ground water system.

## Section 6 Accidental Release Measure

**> Personal Precautions, Protective Equipment and Emergency Procedures**

- 1 Ensure adequate ventilation. Remove all sources of ignition.
- 2 Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
- 3 Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.

**> Environmental Precautions**

- 1 Prevent further leakage or spillage if safe to do so.
- 2 Discharge into the environment must be avoided.

**> Methods and Materials for Containment and Cleaning Up**

- 1 Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
- 2 Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
- 3 Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

## Section 7 Handling and Storage

**> Precautions for Handling**

- 1 Handling is performed in a well ventilated place.
- 2 Wear suitable protective equipment.
- 3 Avoid contact with skin and eyes.
- 4 Keep away from heat/sparks/open flames/ hot surfaces.
- 5 Take precautionary measures against static discharges.

**> Precautions for Storage**

- 1 Keep containers tightly closed.
- 2 Keep containers in a dry, cool and well-ventilated place.
- 3 Keep away from heat/sparks/open flames/ hot surfaces.
- 4 Store away from incompatible materials and foodstuff containers.

**Section 8 Exposure Controls/Personal Protection****> Control Parameters****Occupational Exposure Limit Values**

No information available

**Biological Limit Values**

No information available

**Monitoring Methods**

- 1 EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
- 2 GBZ/T 160.1~GBZ/T 160.81-2004 Determination of toxic substances in workplace air( Series standard ).

**> Engineering Controls**

- 1 Ensure adequate ventilation, especially in confined areas.
- 2 Ensure that eyewash stations and safety showers are close to the workstation location.
- 3 Use explosion-proof electrical/ventilating/lighting/equipment.
- 4 Set up emergency exit and necessary risk-elimination area.

**> Personal Protection Equipment**

<b>Eye Protection</b>	Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US).
<b>Hand Protection</b>	Wear protective gloves ( such as butyl rubber ) , passing the tests according to EN 374(EU),US F739 or AS/NZS 2161.1 standard.
<b>Respiratory protection</b>	If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.
<b>Skin and Body Protection</b>	Wear fire/flame resistant/retardant clothing and antistatic boots.

**Section 9 Physical and Chemical Properties****Appearance:** Light pink powder**Odor:** No information available**Odor Threshold:** No information available**pH:** No information available**Melting Point/Freezing Point (°C):** No information available**Initial Boiling Point and Boiling Range (°C):** >35**Flash Point (°C)( Closed Cup):** Not applicable**Evaporation Rate:** Not applicable

**Flammability:** No information available

**Vapor Pressure (MPa):** Not applicable

**Relative Density (g/cm<sup>3</sup>):** 2.95

**n-Octanol/Water Partition Coefficient:** No information available

**Decomposition Temperature (°C):** No information available

**Particle characteristics:** No information available

**Upper/lower explosive limits[%(v/v)]:** Upper limit : No information available ; Lower limit : No information available

**Vapor Density (g/mL):** Not applicable

**Solubility:** No information available

**Auto-Ignition Temperature(°C):** No information available

**Kinematic Viscosity (mm<sup>2</sup>/s):** Not applicable

## Section 10 Stability and Reactivity

<b>Reactivity</b>	Contact with incompatible substances can cause decomposition or other chemical reactions.
<b>Chemical Stability</b>	Stable under proper operation and storage conditions.
<b>Possibility of Hazardous Reactions</b>	No information available
<b>Conditions to Avoid</b>	Incompatible materials, heat, flame and spark.
<b>Incompatible Materials</b>	No information available
<b>Hazardous Decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11 Toxicological Information

### > Acute Toxicity

No information available

### > Skin Corrosion/Irritation

No information available

### > Serious Eye Damage/Irritation

No information available

### > Skin Sensitization

No information available

### > Respiratory Sensitization

No information available

### > Germ Cell Mutagenicity

No information available

### > Carcinogenicity

ID	CAS No.	Component	IARC	NTP
1	10034-96-5	Manganese (II) Sulfate	Not Listed	Not Listed

		Monohydrate		
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> **Reproductive Toxicity**

No information available

> **Reproductive Toxicity (Additional)**

No information available

> **STOT-Single Exposure**

No information available

> **STOT-Repeated Exposure**

May cause damage to organs through prolonged or repeated exposure(Category 2)(Manganese (II) Sulfate Monohydrate)

> **Aspiration Hazard**

No information available

## Section 12 Ecological Information

> **Acute Aquatic Toxicity**

Component	CAS No.	Fish	Crustaceans	Algae
Manganese (II) Sulfate Monohydrate	10034-96-5	LC <sub>50</sub> : 130mg/L (96h)(Fish)	EC <sub>50</sub> : 22.8mg/L (48h)	No information available

> **Chronic Aquatic Toxicity**

No information available

> **Others**

**Persistence and Degradability**

No information available

**Bioaccumulative Potential**

No information available

**Mobility in Soil**

No information available

**Results of PBT and vPvB Assessment**

Manganese (II) Sulfate Monohydrate does not meet the criteria for PBT and vPvB according to Regulation (EC) No 1907/2006, annex XIII.

## Section 13 Disposal Considerations

**Waste Chemicals Contaminated Packaging Disposal Recommendations**

If medical advice is needed, have product container or label at hand. Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible. Refer to section 13.1and 13.2.

## Section 14 Transport Information

Transporting Label



Marine pollutant



**UN Number** 3077  
**UN Proper Shipping Name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID, N.O.S.  
**Transport Hazard Class** 9  
**Transport Subsidiary Hazard Class** None  
**Packing Group** III

## Section 15 Regulatory Information

### > International Chemical Inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS	ENCS
Manganese (II) Sulfate Monohydrate	×	×	×	✓	✓	✓	×	✓	×

【EINECS】 European Inventory of Existing Commercial Chemical Substances.

【TSCA】 United States Toxic Substances Control Act Inventory.

【DSL】 Canadian Domestic Substances List.

【IECSC】 China Inventory of Existing Chemical Substances.

【NZIoC】 New Zealand Inventory of Chemicals.

【PICCS】 Philippines Inventory of Chemicals and Chemical Substances.

【KECI】 Existing and Evaluated Chemical Substances.

【AICS】 Australia Inventory of Chemical Substances.

【ENCS】 Existing And New Chemical Substances.

#### Note

“√” Indicates that the substance included in the regulations

“×” That no data or included in the regulations

## Section 16 Additional Information

**Creation Date** 2016/08/24

**Revision Date** 2016/08/24

**Reason for Revision** -

### > Disclaimer

This Safety Data Sheet (SDS) was prepared according to UN GHS (the 6th revised edition). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user' s reference. Users should make their independent judgment of suitability of this

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