

## Chemical Safety Data Sheet MSDS / SDS

**FERRIC CITRATE**Revision Date:2026-05-31 Revision Number:1

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****Product identifier**

Product name : FERRIC CITRATE  
CBnumber : CB8273091  
CAS : 2338-05-8  
EINECS Number : 219-045-4  
Synonyms : FERRIC CITRATE,Iron Citrate

**Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.  
Uses advised against : none

**Company Identification**

Company : Chemicalbook  
Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing  
Telephone : 010-86108875

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**SECTION 2: Hazards identification****GHS Label elements, including precautionary statements**

Symbol(GHS)



Signal word

Warning

**Precautionary statements**

P337+P313 IF eye irritation persists: Get medical advice/attention.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continuerinsing.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash skin thoroughly after handling.

**Hazard statements**

H319 Causes serious eye irritation

**SECTION 3: Composition/information on ingredients**

## Substance

Product name	: FERRIC CITRATE
Synonyms	: FERRIC CITRATE, Iron Citrate
CAS	: 2338-05-8
EC number	: 219-045-4
MF	: C6H8FeO7
MW	: 247.97

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## SECTION 4: First aid measures

### General advice

Show this safety data sheet to the doctor in attendance.

### If inhaled

After inhalation: fresh air.

### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

### In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

### Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

### Protection of first-aiders

For personal protection see section 8.

### Notes to physician

No data available

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## SECTION 5: Firefighting measures

### Suitable extinguishing media

Water Foam Carbon dioxide (CO<sub>2</sub>) Dry powder

### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

### Specific hazards during fire fighting

Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.

### **Hazardous combustion products**

Carbon oxides Iron oxides

### **Specific extinguishing methods**

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

### **Special protective equipment for fire-fighters**

In the event of fire, wear self-contained breathing apparatus.

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## SECTION 6: Accidental release measures

### **Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: For personal protection see section 8.

### **Environmental precautions**

Do not let product enter drains.

### **Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

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## SECTION 7: Handling and storage

### **Handling**

#### **Avoidance of contact**

Strong oxidizing agents

#### **Storage**

#### **Further information on storage conditions**

Tightly closed. Dry.

#### **Storage class**

13, Non Combustible Solids

#### **Recommended storage temperature**

Recommended storage temperature see product label.

#### **Further information on storage stability**

Light sensitive.

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## SECTION 8: Exposure controls/personal protection

**control parameter****Hazard composition and occupational exposure limits**

Does not contain substances with occupational exposure limits.

**Engineering measures**

No data available

**Personal protective equipment****Respiratory protection**

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Recommended Filter type**

Filter type P2

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

**Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Safety glasses

**Skin and body protection**

protective clothing

**Hand protection****Material**

Nitrile rubber

**Break through time**

480 min

**Glove thickness**

0.11 mm

**Protective index**

Full contact

**Manufacturer**

KCL 741 L

**Material**

Nitrile rubber

**Break through time**

480 min

**Glove thickness**

0.11 mm

**Protective index**

Splash contact

**Manufacturer**

KCL 741 L

**Remarks**

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D- 36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

#### **Hygiene measures**

Change contaminated clothing. Wash hands after working with substance.

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## **SECTION 9: Physical and chemical properties**

### **Information on basic physicochemical properties**

crystalline

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#### **Color**

Garnet red powder

#### **Odor**

Odorless

#### **Odor Threshold**

No data available

#### **pH**

No data available

#### **Melting point/ range**

169 °C (1,013 hPa)

Method: OECD Test Guideline 102

GLP: no

#### **Boiling point/boiling range**

No data available

#### **Flash point**

No data available

#### **Evaporation rate**

No data available

#### **Burning rate**

No data available

#### **Upper explosion limit / Upper flammability limit**

No data available

#### **Lower explosion limit / Lower flammability limit**

No data available

**Vapor pressure**

0Pa at 25°C

**Relative vapor density**

No data available

**Relative density**

1.906[at 20°C]

**Density**

1.906 g/cm<sup>3</sup> (20 °C)

Method: OECD Test Guideline 109

GLP: no

**Water solubility**

0.05 g/l (23 °C)

Method: Regulation (EC) No. 440/2008, Annex, A.6

GLP: no

**Partition coefficient: n-octanol/water**

No data available

**Autoignition temperature**

No data available

**Decomposition temperature**

No data available

**Viscosity, dynamic**

No data available

**Viscosity, kinematic**

No data available

**Flow time**

No data available

**Explosive properties**

No data available

**Oxidizing properties**

No data available

**Molecular weight**

262.96 g/mol

## Particle characteristics Particle size

No data available

## Physical state

Solid

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## SECTION 10: Stability and reactivity

### Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### Possibility of hazardous reactions

No data available

### Conditions to avoid

no information available

### Incompatible materials

Strong oxidizing agents

### Hazardous decomposition products

In the event of fire: see section 5

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Oral: No data available

Inhalation: No data available

Dermal: No data available

#### Skin corrosion/irritation

Skin - reconstructed human epidermis (RhE)

Result: No skin irritation (OECD Test Guideline 439)

#### Serious eye damage/eye irritation

Eyes - Human

Result: Causes serious eye irritation.

(OECD Test Guideline 492)

#### Respiratory or skin sensitization

Classified based on available data. For more details, see section 2

**Germ cell mutagenicity**

Classified based on available data. For more details, see section 2

**Carcinogenicity**

Classified based on available data. For more details, see section 2

**Reproductive toxicity**

Classified based on available data. For more details, see section 2

**Specific target organ toxicity - single exposure**

Classified based on available data. For more details, see section 2

**Specific target organ toxicity - repeated exposure**

Classified based on available data. For more details, see section 2

**Aspiration hazard**

Classified based on available data. For more details, see section 2

**11.2 Additional Information**

Repeated dose toxicity - Rat - Oral - 32 Weeks - No observed adverse effect level - 2,800 mg/kg

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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## SECTION 12: Ecological information

**Ecotoxicity**

**Components:**

**Iron citrate monohydrate:**

**Toxicity to fish**

Remarks: No data available

**Persistence and degradability**

**Components:**

**Iron citrate monohydrate:**

**Biodegradability**

Remarks: No data available

**Bioaccumulative potential**

**Components:**

**Iron citrate monohydrate:**

**Bioaccumulation**

Remarks: No data available

**Mobility in soil**

**Components:****Iron citrate monohydrate:****Stability in soil**

Remarks: No data available

**Other adverse effects****Components:****Iron citrate monohydrate:****Additional ecological information**

No data available

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## SECTION 13: Disposal considerations

**Disposal methods****Waste from residues**

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

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## SECTION 14: Transport information

**International Regulations****IATA-DGR**

Not regulated as a dangerous good

UN/ID No. : Not applicable

Proper shipping name : Not applicable

Class : Not applicable

Subsidiary risk : Not applicable

Packing group : Not applicable

Labels : Not applicable

Packing instruction (cargo aircraft) : Not applicable

Packing instruction (passenger aircraft) : Not applicable

**IMDG-Code**

Not regulated as a dangerous good

UN number : Not applicable

Proper shipping name : Not applicable

Class : Not applicable

Subsidiary risk : Not applicable

Packing group : Not applicable

Labels : Not applicable

EmS Code : Not applicable

Marine pollutant : no

### **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

### **National Regulations**

#### **JT/T 617**

UN number : Not applicable

Proper shipping name : Not applicable

Class : Not applicable

Subsidiary risk : Not applicable

Packing group : Not applicable

Labels : Not applicable

Environmentally hazardous : no

### **Special precautions for user**

Remarks : Not classified as dangerous in the meaning of transport regulations.

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## **SECTION 15: Regulatory information**

### **National regulatory information**

#### **Regulations on Safety Management of Hazardous Chemicals**

##### **Catalogue of Hazardous Chemicals**

##### **Hazardous Chemicals for Priority Management**

Not applicable under SAWS

##### **Catalogue of Specially Controlled Hazardous**

Not listed Chemicals

##### **List of Explosive Precursors**

Not listed

##### **Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals**

##### **China Severely Restricted Toxic Chemicals for Import and Export**

Not applicable

##### **Regulation on the Administration of Precursor Chemicals**

## Catalogue and Classification of Precursor Chemicals

Not listed

## Regulations on the Administration of Controlled Chemicals

### List of Controlled Chemicals

Not listed

## Regulations of Ozone Depleting Substances Management

### List of Controlled Ozone Depleting Substances

Not listed

### List of Controlled Ozone Depleting Substances Import and Export

Not listed

## Environmental Protection Law

### List of Priority Controlled Chemicals

Not listed

### List of Key Controlled New Pollutants

Not listed

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## SECTION 16: Other information

### Full text of other abbreviations

#### ACGIH

USA. ACGIH Threshold Limit Values (TLV)

ACGIH / TWA AIC - Australian Invent Transport by Land of Bra bw - Body weight; CMR Standard of the German List (Canada); ECx - Conc associated with x% respo Chemical Substances (Jap response; ERG - Emerge GLP - Good Laboratory P cer; IATA - International Construction and Equipm Half maximal inhibitory c tion; IECSC - Inventory o tional Maritime Dangerou Industrial Safety and H Standardisation; KECl - K tration to 50 % of a test (Median Lethal Dose); MA lution from Ships; MERC of Dangerous Goods; n.o. - No Observed (Adverse) fect Level; NOELR - No Norm; NTP - National Toxi icals; OECD - Organisatio fice of Chemical Safety a and Toxic substance; PIC stances; (Q)SAR - (Quant (EC) No 1907/2006 of th Registration, Evaluation, Accelerating Decompositi Chemical Substance Inve Thailand Existing Chemica States); UN - United Nat Transport of Dangerous WHMIS - Workplace Hazar

8-hour, time-weighted average ry of Industrial Chemicals

ANNT - National Agency for il

ASTM - American Society for the Testing of Materials

- Carcinogen, Mutagen or Reproductive Toxicant

DIN nstitute for Standardisation

DSL - Domestic Substances ntration associated with x% response

ELx - Loading rate se

EmS - Emergency Schedule  
 ENCS - Existing and New n)  
 ErCx - Concentration associated with x% growth rate cy Response Guide  
 GHS - Globally Harmonised System  
 actice  
 IARC - International Agency for Research on Canir Transport Association  
 IBC - International Code for the nt of Ships carrying Dangerous Chemicals in Bulk  
 IC50 ncentration  
 ICAO - International Civil Aviation Organiza- Existing Chemical Substances in China  
 IMDG - Interna- Goods  
 IMO - International Maritime Organisation  
 ISHL alth Law (Japan)  
 ISO - International Organisation for rea Existing Chemicals Inventory  
 LC50 - Lethal Concenopulation  
 LD50 - Lethal Dose to 50% of a test population POL - International Convention for the Prevention of Pol- SUR - The Agreement for the  
 Facilitation of the Transport . - Not Otherwise Specified  
 Nch - Chilean Norm  
 NO(A)EC ffect Concentration  
 NO(A)EL - No Observed (Adverse) Efbserveable Effect Loading Rate  
 NOM - Official Mexican ology Program  
 NZIoC - New Zealand Inventory of Chemfor Economic Co-operation and Development  
 OPPTS - Ofd Pollution Prevention  
 PBT - Persistent, Bioaccumulative S - Philippines Inventory of Chemicals and Chemical Subtative) Structure Activity Relationship  
 REACH - Regulation European Parliament and of the Council concerning the uthorisation and Restriction of Chemicals  
 SADT - Selfn Temperature  
 SDS - Safety Data Sheet  
 TCSI - Taiwan tory  
 TDG - Transportation of Dangerous Goods  
 TECl s Inventory  
 TSCA - Toxic Substances Control Act (United ons  
 UNRTDG - United Nations Recommendations on the oods  
 vPvB - Very Persistent and Very Bioaccumulative  
 ous Materials Information System

**Disclaimer:**

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.