



JUNSEI

## Material safety data sheet

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### SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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Catalog Numbers: 18511

Catalog Name: (Japanese Standards of Quasi-drug Ingredients) Ferric chloride

Company Identification:

Junsei Chemical Co., Ltd.

4-16, 4-Chome, Nihonbashi-Honcho, Chuo-ku

Tokyo, 103-0023 JAPAN

EMERGENCY TELEPHONE NUMBER: +81-48-988-3621

Sales Headquarters

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FAX: +81-48-988-8719 E-mail: shiyaku-t@junsei.co.jp

Web: <http://www.junsei.co.jp/>

CREATION DATE: April 5, 2012

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### SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

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COMPONENT: Ferric chloride

SYNONYMES: Iron(III) chloride hexahydrate

CAS NUMBER:10025-77-1, 7705-08-0(anhydrous)

EC NUMBER (EINECS): unlisted

JAPAN NUMBER (ENCS): 1-213

PERCENTAGE: 99.0+%

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### SECTION 3 HAZARDS IDENTIFICATION

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#### EMERGENCY OVERVIEW

Harmful if swallowed. Causes burns. Harmful. Corrosive. Hygroscopic.

#### Potential Health Effects

Eye:

May cause eye burns.

Skin:

Exposure may cause irritation and possible burns.

Ingestion:

May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated. May be harmful if swallowed.

Based upon known information concerning inorganic iron-containing substances, may cause severe digestive tract irritation with nausea, vomiting, diarrhea, and hemorrhage. May cause delayed effects including cardiovascular disturbances, liver/kidney damage, cerebral swelling, coma, and

Inhalation:

May cause severe irritation of the upper respiratory tract with pain, burns, and inflammation.

Chronic:

Not available.

Repeated exposure may cause an increased body load of iron, with possible chronic systemic effects.

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SECTION 4 FIRST AID MEASURES

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Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion:

Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and

Antidote:

The use of an iron chelator should be determined only by qualified medical personnel.

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SECTION 5 FIRE FIGHTING MEASURES

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General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is noncombustible.

Extinguishing Media:

Use extinguishing media most appropriate for the surrounding fire.

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SECTION 6 ACCIDENTAL RELEASE MEASURES

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General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container.

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SECTION 7 HANDLING AND STORAGE

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Handling:

Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

Storage:

Store in a cool, dry place. Store in a tightly closed container.  
Corrosives area.

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SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION  
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Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES  
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Physical State:	Granules
Appearance:	ochre
Odor:	Not available.
pH:	Not available.
Vapor Pressure:	Not available.
Viscosity:	Not available.
Boiling Point:	280 - 285 deg C @ 760.00mm Hg
Freezing/Melting Point:	37 deg C
Autoignition Temperature:	Not available.
Flash Point:	Not available.
Explosion Limits, lower:	Not available.
Explosion Limits, upper:	Not available.
Decomposition Temperature:	
Solubility:	920 G/L IN WATER (20-C)

Specific Gravity/Density:  
Molecular Formula: FeCl<sub>3</sub>.6H<sub>2</sub>O  
Molecular Weight: 270.29

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SECTION 10 STABILITY AND REACTIVITY  
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Chemical Stability:  
Stable under normal temperatures and pressures.  
Conditions to Avoid:  
Incompatible materials, exposure to moist air or water.  
Incompatibilities with Other Materials:  
Strong oxidizing agents, allyl chloride, potassium, sodium.  
Hazardous Decomposition Products:  
Hydrogen chloride.  
Hazardous Polymerization: Will not occur.

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SECTION 11 TOXICOLOGICAL INFORMATION  
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RTECS#:  
CAS# 10025-77-1 unlisted.  
LD50/LC50:  
Not available.  
Carcinogenicity:  
Iron(III) chloride hexahydrate, pure, granulated -  
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.  
Other:  
See actual entry in RTECS for complete information.

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SECTION 12 ECOLOGICAL INFORMATION  
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Ecotoxicity:  
Invertebrate toxicity:  
EC50 (2 and 4 day *Asellus aquaticus* 183 and  
124 mg/l respectively  
EC50 (2 and 4 day) *Crangonyx pseudogracilis* 160  
and 120 mg/l respectively [Martin, T. R. et al Water Res. 1986,  
20(9), 1137-1147]

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SECTION 13 DISPOSAL CONSIDERATIONS  
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Dispose of in a manner consistent with federal, state, and local regulations.

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SECTION 14 TRANSPORT INFORMATION  
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IATA Shipping Name: CORROSIVE SOLID, ACIDS, INORGANIC,N.O.S.  
Hazard Class: 8 ( Corrosive substances )  
UN Number: 3260  
Packing Group:

( JSQI ) Ferric chloride

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April 5, 2012

IMO Shipping Name: CORROSIVE SOLID, ACIDS, INORGANIC,N.O.S.  
Hazard Class: 8 ( Corrosive substances )  
UN Number: 3260  
Packing Group:  
RID/ADR Shipping Name: CORROSIVE SOLID, ACIDS, INORGANIC,N.O.S.  
Hazard Class: 8 ( Corrosive substances )  
UN Number : 2586  
Packing Group:

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SECTION 15 REGULATORY INFORMATION  
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European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: C

Risk Phrases:

R 22 Harmful if swallowed.

R 34 Causes burns.

Safety Phrases:

S 25 Avoid contact with eyes.

S 36/37/39 Wear suitable protective clothing, gloves  
and eye/face protection.

S 45 In case of accident or if you feel unwell, seek  
medical advice immediately (show the label where  
possible).

WGK (Water Danger/Protection)

CAS# 10025-77-1: No information available.

United Kingdom Occupational Exposure Limits

Canada

None of the chemicals in this product are listed on the DSL/NDSL list.

CAS# 10025-77-1 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 10025-77-1: OEL-DENMARK:TWA 1 mg(Fe)/m3 JANUARY 1993

OEL-FINLAND:TWA 1 mg(Fe)/m3 JANUARY 1993

OEL-THE NETHERLANDS:TWA 1 mg(Fe)/m3 JANUARY 1993

OEL-SWITZERLAND:TWA 1 mg(Fe)/m3 JANUARY 1993

OEL-UNITED KINGDOM:TWA 1 mg(Fe)/m3;STEL 2 mg(Fe)/m3 JANUARY 1993

US FEDERAL

TSCA

CAS# 10025-77-1 is not on the TSCA Inventory. It is a hydrate and  
exempt from TSCA Inventory requirements (40CFR720.3(u)(2)).

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SECTION 16 OTHER INFORMATION  
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REFERENCES:

- The Merck Index 14 edition, Monographs No. 4019
- Chemical Risk Information Platform (CHRIP)
- Information about the status of the implementation of GHS in Japan (ID= 831)

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April 5, 2012

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.

Junsei Chemical Co.,Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.