GHS Safety Data Sheet

SDS No.: FEH02XAEG Date Issued: 2019/11/12

Section 1. Identification of the substance or mixture and of the supplier

Product Information

Product name: FeCl₃·6H₂O Iron(III) chloride, hydrous

Product	Purity	Form	Size or Shape
FEH23XB	99%(2N)	_	_

Company Information:

Manufacturer: Kojundo Chemical Laboratory Co., Ltd.

1-28, 5-chome, Chiyoda, Sakado-shi, Saitama Japan 350-0284

Phone: +81-49-284-1511 Fax: +81-49-284-1351

Emergency Phone: +81-49-284-1511

Recommended uses and restrictions on use: For research purposes

Section 2. Hazards identification

GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
Acute toxicity(Oral): Category 4 Skin corrosion/irritation: Category 1 Serious eye damage/ eye irritation: Category 1 Specific target organ toxicity, single exposure: Category1,3	Hazardous to the aquatic environment, acute toxicity: Category3	Flammable solids: Not classified Pyrophoric solids: Not classified Self-heating substances and mixtures: Not classified Substances and mixtures which, in contact with water, emit flammable gases: Not classified

GHS Label: R, C, W







Dispose of contents/ container in accordance with local/national regulations.

Pictograms or symbols:

Warning word: DANGER		
Hazard information	Description of precaution	
Harmful if swallowed Causes severe skin burns and eye damage Causes serious eye damage Causes damage to organs (Systemic toxicity) May cause respiratory irritation Harmful to aquatic life	Wear protective gloves/protective clothing/eye protection/respiratory protection/face protection during handling. Avoid breathing dust/mist/gas/fume/vapors/spray. Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling. Take off the contaminated clothing and wash before reuse. Use only outdoors or in well-ventilated area. Avoid release to the environment and collect spillage. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Remove immediately all contaminated clothing and rinse skin with water/shower. Then wash skin with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Immediately call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell. Protect from sunlight. Store in a cool, dry and well-ventilated place. Keep container	

tightly closed. Store locked up.



Section 3. Composition / information on ingredients

Chemical or common name: Iron(III) chloride hexahydrate Synonyms: Ferric chloride hexahydrate

Chemical formula: FeCl₃·6H₂O Single Substance or Compound: Single substance

Composition: 100% CAS #: 10025-77-1 RTECS#: NO5425000

TSCA inventory: Listed (anhydrous)
EINECS: 2317294 (anhydrous)

Section 4. First aid measures

Eye contact: Promptly wash eyes with plenty of water while lifting the eye lids.

Continue to rinse for at least 15 minutes and get medical attention.

Skin contact: Promptly flush contaminated skin with soap or mild detergent and water.

Contact physician if irritation continues.

Inhalation: Remove the exposed person immediately and provide fresh air.

Get medical attention.

Ingestion: Rinse mouth and throat with water. Get medical attention immediately.

Section 5. Fire fighting measures

Extinguishing media: Carbon dioxide, Dry chemical powder, dry sand.

DO NOT use a direct water stream.

Fire fighting: The product is not combustible.

In case of fire, the product may liberate irritating or toxic fume or gases. Self-contained breathing apparatus and full protective clothing should be

used, if the material is involved in fire

Section 6. Accidental release measures

Personal Precautions:

Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its vapor/dusts.

Environmental hazard precautions:

Shut off leak if without risk.

Prevent flow out to river, etc. so as not to badly affect.

Method for containment and cleaning up:

Avoid unnecessary contacts with spills.

Indoor leakage: Ventilate as much as possible until the cleaning is completed. Outdoor leakage: Work from the windward and evacuate the leeward crowd. Gather up, pack in closed DOT-approved waste container as much as possible.

Carefully collect remnant and move to a safe place.

Section 7. Handling and storage

Precautions to be taken in handling:

Safe handling: Use protective wears and local ventilation equipment, if inhalation or skin

contact is foreseen.

Avoid prolonged or repeated exposure.

Precautions to be taken in storage:

General precautions: Store the material in a sealed container.

Store in a cool, dry, well ventilated and dark place away from incompatible materials.



Section 8. Exposure controls / personal protection

Exposure guideline: ACGIH(2019): lron salts, soluble (as Fe); TLV-TWA 1 mg/m³

OSHA(2006): No data available

Facility measures: Local ventilation of closed work room or total proper ventilation to prevent

inhalation.

Protective ware: Wear appropriate NIOSH/MSHA-approved respirator, safety goggles,

protective gloves.

Section 9. Physical and chemical properties

Appearance: Brownish yellow solid.

Chemical formula: FeCl₃· $6H_2O$ Formula weight: 270.3 Melting point: 36.5 °C

Boiling point: $280 \,^{\circ}\text{C}$ Solubility in water: Soluble

Solubility in: Ethanol, ether, acetone Flammable: Non-combustible substance

Oxidation: None

Section 10. Stability and reactivity

Stability: Stable in closed container under room temperature.

Deliquescent.

Reactvity

Condition to avoid: Heat, moisture, air

Incompatibility: Alkali metals, allyl chloride, ethylene oxide, styrene and bases.

Section 11. Toxicological information

Acute toxicity(Oral): GHS: Category 4; Harmful if swallowed

 $FeCl_3$; Rat $LD_{50} = 900$ mg/kg etc. (SIDS(2008))

Skin corrosive / irritation: GHS: Category 1; Causes severe skin burns and eye damage

Serious eye damage / irritation: GHS: Category 1; Causes serious eye damage

Respiratory sensitization:

GHS: No data available
Germ cell mutagenicity:

GHS: No data available
Reproductive toxicity:

GHS: No data available

Specific target organ toxicity

-single exposure: GHS: Category 1; Causes damage to organs (Systemic toxicity)

Category 3; May cause respiratory irritation

 $-{\tt repeated\ exposure:}\quad {\tt GHS:No\ data\ available}$

Aspiration hazard: GHS: No data available

Section 12. Ecological information

Ecotoxicity:

Hazardous to the aquatic environment

-acute toxicity: GHS: Category 3; Harmful to aquatic life

FeCl₃; Crustacea (Daphnia magna) LC₅₀ (48h)= 37.5 mg/L (SIDS(2008))

-chronic toxicity: GHS: Not classified.; Falls below the lowest level.

FeCl₃; Crustacea (Daphnia magna) NOEC(21d)= 2.0 mg/L (SIDS(2008))



Hazardous to the ozone layer GHS: No data available

No Freon or Halon

Fish toxicity: No data available
Degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available

Section 13. Disposal considerations

Disposal method: User of the product should contract with the local government or licensed

'Industrial Waste Haulers' for disposal of waste.

Section 14. Transport information

UN number: 3260

IATA shipping name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.

IATA classification: Hazardous Class 8 (Corrosive substances)

IATA packing group:

HS code: 2827.39 Marine pollution: None

Section 15. Regulatory information

TSCA inventory: Listed.

Please refer to any other local / national measures that may be relevant.

Section 16. Other information

This SDS is only for provision of information, and it does not represent a guarantee the properties or safeties of the product.

The information herein is based on the references we could obtained and the present state of our knowledge, however, this SDS does not always cover all information about the product. Some new information or amendments may be added afterwards.

Prior to use, please investigate the laws and regulations of the organization, area and country where the product is to be used. The information is intended to ordinary usage, in case of special handling, sufficient care should be taken.

