



Material Safety Data Sheet

Section 1 IDENTIFICATION

GHS Product identifier: Ferric chloride.

Other means of identification: Ferric chloride

Recommended use of the chemical and restrictions on use: This product can be used for water treatment agent, mordant catalyst, chloride, and used in the manufacture of other iron etc. only for industrial use

Supplier's details: Shandong Hosea Chemical Co., Ltd.

Emergency phone number: +86-536-4640558

Section 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Corrosive to Metals Category 1,

Acute Toxicity (Oral) Category 4

Skin corrosion/irritation Category 1C

Serious eye damage / irritation Category 1

GHS Label elements, including precautionary statements:



Signal word: Danger

Hazard statement(s): May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage.

Precautionary statement(s):

Prevention:

Keep only in original container. Do not breathe dusts or mists. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.

Response:

Absorb spillage to prevent material damage. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. Specific treatment (see below). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Storage:

Store locked up. Store in corrosive resistant/container with a resistant inner liner.

Disposal:

Dispose of contents/container to relevant regulations.

Other hazards which do not result in classification: /

Section 3 COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Concentration% |
|---------------|---------|----------------|
|---------------|---------|----------------|



| | | |
|------------------|-----------|-------|
| Ferric chloride | 7705-08-0 | 98.0% |
| Ferrous chloride | 7758-94-3 | 1.5% |

Section 4 FIRST AID MEASURES

Description of necessary first aid measures

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If Ingestion: IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY. For advice, contact a Poisons Information Centre or a doctor.

Most important symptoms/effects, acute and delayed: Central nervous system depression, Drowsiness, narcosis, anemia.

Indication of immediate medical attention and special treatment needed, if necessary: /

Section 5 FIREFIGHTING MEASURES

Suitable extinguishing media: There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area.

Special hazards arising from the chemical: Non-combustible. Not considered a significant fire risk, however containers may burn. May emit corrosive, poisonous fumes.

Special protective actions for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary. Use water spray to cool unopened containers.

Section 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapors and contact with skin and eyes.

Environmental precautions: Prevent, by any means available, spillage from entering drains or water course.

Methods and materials for containment and cleaning up: Minor Spills: With clean shovel place material into clean, dry container and cover loosely. Major Spills: Contain or cover with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Collect solid residues and seal in labelled

Section 7 HANDLING AND STORAGE

Precautions for safe handling: Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with moisture. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers.

Conditions for safe storage, including any incompatibilities: Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters: /

Appropriate engineering controls: Local exhaust ventilation is required where solids are handled as



powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction.

Individual protection measures

Eye/face protection: Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.

Skin protection: Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber.

Respiratory protection: Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant.

Thermal hazards: /

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

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|---|--|
| Appearance (physical state, colour etc) | Tan solid |
| Odour | / |
| Odour Threshold | / |
| pH | / |
| Melting point/freezing point | 304°C |
| Initial boiling point and boiling range | / |
| Flash point | / |
| Evaporation rate | / |
| Flammability (solid, gas) | / |
| Upper/lower flammability or explosive limits | / |
| Vapour pressure | / |
| Vapour density | / |
| Relative density | 2.9 |
| Solubility(ies) | Hydrogen chloride and ferric hydroxide may generate by reacting with water |
| Partition coefficient: n-octanol/water | / |
| Auto-ignition temperature | / |
| Decomposition temperature | / |
| Viscosity | / |

Section 10 STABILITY AND REACTIVITY

Reactivity: /

Chemical stability: This material is stable in normal temperature.

Possibility of hazardous reactions: When heated to above 200 °C, the substance decomposes producing toxic and corrosive gases containing chlorine and hydrogen chloride. When in contact with water, the substance decomposes hydrogen chloride. Solution is a strong acid, alkali metal can, allyl chloride, ethylene oxide, styrene and bases react with intense, there is a risk of explosion. Solution can corrode metal, generate flammable / explosive hydrogen gas.

Conditions to avoid: Fire, heat, moist air.

Incompatible materials: Flammable or combustible materials, oxidizing agents, bases, water.

Hazardous decomposition products: Hydrogen chloride (HCl).

Section 11 TOXICOLOGICAL INFORMATION



Information on the likely routes of exposure: Inhaled, swallowed, skin, eyes.

Symptoms related to the physical, chemical and toxicological characteristics: /

Acute health effects: May be harmful if inhaled. May cause respiratory tract irritation. Accidental ingestion of the material may be harmful. May be harmful if absorbed through skin. Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s)

Chronic health effects: Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.

Numerical measures of toxicity(such as acute toxicity estimates):

Oral (mouse) LD50: 895 mg/kg

Oral (rat) LD50: 450 mg/kg

Section 12 ECOLOGICAL INFORMATION

Toxicity: Harmful to aquatic organisms.

Daphnia EC50 (48 hour)(mg/L): 15 (96hr)

Alga IC50 (72 hour)(mg/L): 1

Persistence and degradability: High.

Bioaccumulative potential: Slight.

Mobility in soil: High.

Other adverse effects: /

Section 13 DISPOSAL CONSIDERATIONS

Disposal methods: Safety landfill disposal method. Damaged container was prohibited to reuse. To bury at the specified places.

Section 14 TRANSPORT INFORMATION

UN number: 1773.

UN proper shipping name: Ferric chloride.

Transport hazard class(es) : 8.

Packing group, if applicable: III.

Environmental hazards: /

Special precautions for user: /

Section 15 REGULATORY INFORMATION

Regulations: This safety data sheet is in compliance with the following national standards: GB 16483-2008, GB 13690-2009, GB/T 15098-2008, GB 18218-2009, GB 15258-2009, GB 6944-2012, GB 190-2009, GB 191-2009, GB 12268-2008, GA 57-1993, GBZ 2-2007 as well as the following national regulations: Dangerous Goods Transport Administrative Regulation [Published by the Ministry of Railways, 2008], Dangerous Chemicals Safety Administrative Regulation [Published by the State Council, 2011].

Section 16 OTHER INFORMATION



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| References | UN Recommendations on the Transport of Dangerous Goods Model Regulations UN Globally Harmonized System of Classification and Labelling of Chemicals |
| Form Date | 09-Jan-2015 |

Note 1: When products contain two or more hazardous substances, Safety Data Sheets should be prepared based on the risk of the mixture.

Note 2: Manufacturer / supplier should ensure the correctness of the information contained in the safety data sheets, and updated in a timely manner.

Note 3: As a result of product features without the existence of certain information or no data available (such as boiling point does not exist for the solid) in the table with "/" logo.

