

**Safety Data Sheet**

Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER	
Product name:	Ferric Chloride Solid 98%/Ferric Chloride Liquid 40%
Other Names:	Iron (III) chloride; Iron sesquichloride; Iron trichloride
Chemical formula:	FeCl ₃
Recommended Use:	Wastewater treatent, purifying factory effluents and deodorizing sewage, mordant in dyeing and printing textiles; pigments and inks; photoengraving.
Company Identification:	Kemcore International Limited
Address:	133 CONNAUGHT RD UNIT 703 ALLIANCE COMM BLDG, HONGKONG
Customer Centre:	
Section 2: HAZARD IDENTIFICATION	
Emergency Overview:	Harmful if swallowed. May cause adverse reproductive effects based upon animal studies. May cause liver and kidney damage. Causes burns by all exposure routes
Potential Acute Health Effects	Very hazardous in case of ingestion. Hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator). Corrosive to eyes and skin. The amount of tissue damage depends on length of contact.
Routes of entry:	Inhalation, Ingestion, Eye Contact, Skin Contact.
Target organs:	Kidneys, liver, cardiovascular system.
Skin contact:	Product is a moderate skin irritant. Can cause irritation or corrosive chemical burns to human tissue. High heat of solution)

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	can cause severe thermal burns if in contact with moist skin or mucous tissue.	
Eye contact:	Contact with eyes may cause irritation and may be corrosive and result in permanent visual loss unless removed quickly by thorough irrigation with water.	
Inhalation:	Inhalation of spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Repeated exposure may produce respiratory tract irritation leading to frequent attacks of bronchial infection.	
Ingestion:	Ingestion may cause severe liver and/or kidney damage. May also cause damage to the gastrointestinal tract.	
Chronic Exposure:	Effects may be delayed.	
Explanation of carcinogenicity:	This product is not listed by NTP, IARC or regulated as a Carcinogen by OSHA	
Medical conditions aggravated by exposure:	Caused erythema (a rash) to skin of rabbits.	
Section 3: Composition Information		
INGREDIENT	CAS No.	CONTENT
Ferric Chloride	7705-08-0	100%
Section 4: FIRST AID MEASURES		
Inhalation:	Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek immediate medical attention.	
Ingestion: a	Do not induce vomiting. If vomiting occurs, lean victim forward to prevent breathing in vomit. Give large amounts of water. Do not give anything by mouth to an unconscious or convulsing person.	

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	Seek immediate medical attention.
Skin:	Remove contaminated clothing. Wash affected area with soap and water. Seek medical attention if irritation occurs or persists.
Eye:	Flush immediately with water for at least 20 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. Seek immediate medical attention.
Advice to Doctor:	Treat symptomatically as for acidic material and iron salts
Section 5: FIREFIGHTING MEASURES	
Flash Point:	Not applicable
Combustion Products:	Hydrogen chloride, phosgene
Extinguishing Media:	Product does not burn. Where fire is involved, use any fire fighting agent(water spray, fog, foam)appropriate for surrounding material; use water spray to cool fire-exposed surfaces.
Protective Equipment:	Wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
HAZCHEM Code:	2X
Section 6: ACCIDENTAL RELEASE MEASURES	
Spills and Disposal:	Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.
Protective Clothing:	Use proper personal protective equipment as indicated in Section 8.
Environmental:	Prevent contamination of soil, drains and surface water.

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Section 7: HANDLING AND STORAGE	
Handling:	Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.
Storage:	Keep container tightly closed. Do not store in metal containers. Aluminium, copper and stainless steel are readily attacked. Provide venting for rubber lined steel to avoid pressure buildup. Materials of construction to be used can include polyethylene, polypropylene, rubber-lined steel and FRP designated as appropriate for use with this product. Storage tanks should be vented to scrubber or exterior atmosphere. Storage facilities should have secondary containment as required by law or regulation. Storage tanks, piping and offloading points should be labeled with appropriate signage to avoid accidents. Some concentrations of this product will freeze or crystallize at low temperatures. Insulate and heat-trace storage tanks, pumps, pipes and ancillary equipment as necessary. Product should be used within one year.
Other Information:	
Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION	
Exposure Limits:	TWA: 1mg/m ³
Protective Equipment:	Impervious boots of chemically resistant material should be worn at all times. Body suits, aprons, and/or coveralls of chemical resistant material should be worn at all times. Use NIOSH-approved acid gas respirator or a self-contained breathing apparatus if airborne concentrations may exceed exposure limits. Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is handled. Contact lenses should not be worn; they may contribute to severe eye injury.
Engineering Controls:	Mechanical ventilation (dilution or local exhaust), process or personnel enclosure, and control of process conditions should be provided. Supply sufficient replacement air to make up for air

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	removed by exhaust systems. Emergency shower and eyewash should be in close proximity.
Hygiene Precautions:	Wash contaminated clothing with soap and water, dry thoroughly before reuse. Avoid breathing dust.
Section 9. PHYSICAL AND CHEMICAL PROPERTIES	
Appearance:	Dark gray to black or brown
Odour:	Odourless
Specific Gravity:	2.9
Bulk Density:	920 g/l (20°C)
pH:	2.0
Solubility in Water:	50% by weight
Flash Point:	Not available
Melting Point:	300 °C
Other Information:	
Section 10: STABILITY AND REACTIVITY	
Stability:	Hygroscopic: absorbs moisture or water from the air.
Hazardous Decomposition Products:	Decomposes to yield hydrochloric gas on exposure to light.
Conditions to Avoid:	Incompatible materials, dust generation, excess heat, exposure to moist air or water.
Materials to Avoid:	Strong oxidizing agents, alkali metals, allyl chloride, ethylene oxide, potassium, sodium.

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Section 11: TOXICOLOGICAL INFORMATION	
ERMA Classification:	6.1D (oral), 8.1A, 8.2C, 8.3A
Ingestion:	Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.
Inhalation:	Breathing in mists or aerosols may produce respiratory irritation.
Skin:	Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns.
Eye:	A severe eye irritant. Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.
Chronic Effects:	No information available for the product.
Other Information:	
Section 12: ECOLOGICAL INFORMATION	
ERMA Classification:	9.1C (fish and crustacean), 9.3B
Ecotoxicity:	Avoid contaminating waterways.
Section 13: DISPOSAL INFORMATION	
Product Disposal:	Refer to local government authority for disposal recommendations. Dispose of material through a licensed waste contractor. Normally suitable for disposal at approved land waste site.
Container Disposal:	Decontamination and destruction of containers should be considered.

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Section 14: TRANSPORT INFORMATION	
UN Number:	1773
Proper Shipping Name:	Ferric Chloride Solid
DG Class:	8
UN Packing Group:	III
Other Information:	
Section 15: REGULATORY INFORMATION	
<p>Federal and State Regulations: Pennsylvania RTK: Ferric chloride Massachusetts RTK: Ferric chloride TSCA 8(b) inventory: Ferric chloride CERCLA: Hazardous substances.: Ferric chloride</p> <p>Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).</p> <p>Other Classifications:</p> <p>WHMIS (Canada): CLASS E: Corrosive solid. CLASS F: Dangerously reactive material.</p> <p>DSCL (EEC): R36/38- Irritating to eyes and skin.</p>	
Section 16: OTHER INFORMATION	