

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION.

Trade Name:	Ferric chloride
Product Description:	Iron (III) chloride
Synonyms:	
Manufacturer/Supplier:	Central Chemical Supplies Limited 44 Hall Road Donaghcloney, Craigavon, Co. Armagh, BT66 7LJ. Northern Ireland.
Telephone Number:	+44 (0) 28 38 881 936.
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2. HAZARD IDENTIFICATION.

Main Risks:	May cause burns
Inhalation:	May cause burns on mucous membranes
Skin contact:	May cause skin irritation, i.e. redness, eczema
Contact with eyes:	May cause eye burns
Ingestion:	May cause sickness and vomiting
Environmental Risks:	The product can hydrolyse and form a precipitate of metalhydroxide when diluted beyond a particular level. The solubility of the product is dependent on the pH value.

3. COMPOSITION/INFORMATION ON INGREDIENTS.

<i>Chemical Name</i>	<i>EINECS No</i>	<i>CAS-No</i>	<i>% w/w</i>	<i>Symbols</i>	<i>R Phrases</i>
Iron (III) chloride		7705-08-0	35 -40	C	R: 34
Hydrochloric acid		7647-01-0	1-3	C	R: 34

4. FIRST AID MEASURES.

Inhalation:	Rinse nose and mouth with water. Breathe fresh air.
Skin contact:	Take off contaminated clothes. Wash skin.

Contact with eyes: Rinse immediately with water for at least 15 minutes.
Seek medical attention.

Ingestion: Drink milk or water. Do not induce vomiting.

5. FIRE FIGHTING MEASURES

Extinguishing media:
Suitable: Will not burn, use media appropriate for surrounding media.
Not suitable: None

Specific hazards: Thermal decomposition may cause hazardous fumes.

Specific protection of firefighters: Use suitable safety equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use appropriate protective clothing

Environmental Precautions: Do not let product enter drains.

Methods for cleaning up
On ground: Flush with plenty of water, if possible neutralise with lime
On water: Inform police and/or fire brigade.

7. HANDLING AND STORAGE

Storage conditions: Containers should be of acid resistant material

Storage stability: Approx. 1 year

Technical protective measures: Handle in accordance with good industrial hygiene and safety practice.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure: When handling, the working area and methods should be designed to prevent direct contact with the product and inhibit dust and/or splash.

Personal protective equipment:

Inhalation: None

Skin: Protective clothing, rubber or plastic gloves

Eye protection: Safety glasses with side shields. Equipment for eye rinsing.

TLV (US)¹⁾ 1 mg Fe/m³

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Brown solution
Odour	weak sourish
pH (conc.)	approx. 0, in concentrated solution
Boiling temperature (°C)	100-105
Melting/decomposition temp (°C)	315 ³⁾
Flashpoint (°C)	None
Density (kg/m ³)	1410-1440
Solubility in water (weight - %)	Complete at 20°C
Solubility in organic solvents	None
Log P _{ow}	<<3

10. STABILITY AND REACTIVITY

Conditions to avoid	Avoid contact with alkalis
Materials to avoid	Avoid any contact with metals
Hazardous decomposition products:	Thermal decomposition (> 315 °C) ³⁾ , may release Cl-fumes

11. TOXICOLOGICAL INFORMATION³⁾

Oral LD50, rat (mg/kg)	900
Intraperitoneal LD50, mouse (mg/kg)	260

Splashes cause burns on mucous membranes, eyes and respiratory organs.

12. ECOLOGICAL INFORMATION³⁾

LC Fish ²⁾	1-2mg Fe/l (at pH 5.0-6.7, Lit.36)
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The product is an inorganic substance/preparation. During hydrolysis, a precipitate is formed of metal hydroxide in the pH range 5 to 7. Due to this reaction the pH in the water phase decreases. If phosphates are present, metal phosphate complex may form.

13. DISPOSAL

Waste from product residues	Dilute with water, neutralise with lime. Suitable dumping acc. to local regulations.
Waste from contaminated packaging	Destruction acc. to local regulations

14. TRANSPORT INFORMATION

Transport warning label	8
ADR	Class 8, 5 c
RID	Class 8, 5 c
IMO-IMDG code	Class 8
IATA	Class 8
UN No.	2582

15. REGULATORY INFORMATION

Labelling according to EU directives	
Danger symbol(s)	(C) Corrosive
Risk Phrase(s)	R 34 Causes burns
Safety Phrase(s)	S 26: In the event of contact with eyes, rinse immediately with plenty of water (15min) and seek medical advice S 36: Wear suitable clothing e.g. overalls S 37: Wear suitable gloves made of plastic or rubber S 39: Wear eye/face protection

EINECS No.: 231-729-4

16. OTHER INFORMATION

References	1) Sax's Dangerous Properties of Industrial Materials 8 th ed 2) Hommel, Handbuch der Gefährlichen Guter 3) Reported for FeCl ₃ x 6 H ₂ O
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Disclaimer

The information contained in this document is intended to describe the product only in terms of health, safety and environmental requirements for the purposes of its safe handling, use and disposal and is to the best of Central Chemical Supplies Limited knowledge and belief correct. Central Chemical Supplies Limited Technical Services will be pleased to give further advice and assistance, but customers must satisfy themselves (by appropriate testing if necessary) that the product is suitable for their purposes and conditions of use and that their facilities and arrangements are suitable for handling or using the product. Accordingly Central Chemical Supplies Limited disclaims any liability for loss, injury or damage which may result from the use of the product, this information or from such advice and assistance save as may be expressly agreed under its terms of sale. This information does not comprise a technical or performance specification for the product and customers are referred to any relevant product technical information or specification issued by Central Chemical Supplies Limited.

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