

Safety Data Sheet

Iron (III) Chloride, 10%

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: Iron (III) Chloride, 10%
Recommended Use: Science education applications
Synonyms: Ferric Chloride Solution
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

WARNING



May be corrosive to metals. Harmful if swallowed. Harmful to aquatic life.

GHS Classification:

Substance or mixture corrosive to metals Category 1, Hazardous to the aquatic environment - Acute Category 3, Acute Toxicity - Oral Category 4

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Water		90
Iron (III) chloride	7705-08-0	10

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: After contact with skin, wash immediately with plenty of water.
Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Section 5 Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: Fire or excessive heat may produce hazardous decomposition products.
Hazardous Combustion Products: Hydrogen chloride

Section 6 Spill or Leak Procedures

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Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Absorb spillage to prevent material damage.

Section 7 Handling and Storage

Handling: Keep only in original container. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment.

Storage: Store in corrosive resistant/... container with a resistant inner liner. Keep container tightly closed in a cool, well-ventilated place.

Storage Code: Suitable for any general chemical storage.
White - Corrosive. Separate acids from bases; separate oxidizer acids from organic acids.

Section 8 Protection Information

<u>Chemical Name</u>	<u>ACGIH</u>		<u>OSHA PEL</u>	
	<u>(TWA)</u>	<u>(STEL)</u>	<u>(TWA)</u>	<u>(STEL)</u>
Iron (III) chloride	1 mg/m3 TWA (as Fe)	N/A	N/A	N/A

Control Parameters

Engineering Measures: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: No information available

Section 9 Physical Data

Formula: No data available	Vapor Pressure: No data available
Molecular Weight: No data available	Evaporation Rate (BuAc=1): No data available
Appearance: Colorless Liquid	Vapor Density (Air=1): No data available
Odor: None	Specific Gravity: No data available
Odor Threshold: No data available	Solubility in Water: No data available
pH: No data available	Log Pow (calculated): No data available
Melting Point: No data available	Autoignition Temperature: No data available
Boiling Point: No data available	Decomposition Temperature: No data available
Flash Point: No data available	Viscosity: No data available
Flammable Limits in Air: No data available	Percent Volatile by Volume: No data available

Section 10 Reactivity Data

Reactivity: Not generally reactive under normal conditions.

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: None known.

Incompatible Materials: Water-reactive materials

Hazardous Decomposition Products: Hydrogen chloride

Hazardous Polymerization: Will not occur

Section 11 Toxicity Data

Symptoms (Acute): No data available

Delayed Effects: No data available

Acute Toxicity:

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Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Water		Oral LD50 Rat 90000 mg/kg		
Iron (III) chloride	7705-08-0	Oral LD50 Rat 316 mg/kg Oral LD50 Mouse 200 mg/kg		

Carcinogenicity: Chemical Name	CAS Number	IARC	NTP	OSHA
No data available	7705-08-0	Not listed	Not listed	Not listed

Chronic Effects:	
Mutagenicity:	No evidence of a mutagenic effect.
Teratogenicity:	No evidence of a teratogenic effect (birth defect).
Sensitization:	No evidence of a sensitization effect.
Reproductive:	No evidence of negative reproductive effects.
Target Organ Effects:	
Acute:	No data available
Chronic:	No data available

Section 12 Ecological Data

Overview:	Moderate ecological hazard. This product may be dangerous to plants and/or wildlife.
Mobility:	No data
Persistence:	No data
Bioaccumulation:	No data
Degradability:	No data
Other Adverse Effects:	No data

Chemical Name	CAS Number	Eco Toxicity
Iron (III) Chloride, Anhydrous	7705-08-0	No data available 96 HR LC50 GAMBUSIA AFFINIS 75.6 MG/L [STATIC] 48 HR EC50 DAPHNIA MAGNA 9.6 MG/L [STATIC] 48 HR EC50 DAPHNIA MAGNA 27.9 MG/L

Section 13 Disposal Information

Disposal Methods:	Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s):	Not Determined

Section 14 Transport Information

Ground - DOT Proper Shipping Name: Not regulated for transport by US DOT.	Air - IATA Proper Shipping Name: Not regulated for air transport by IATA.
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Section 15 Regulatory Information

TSCA Status:	All components in this product are on the TSCA Inventory.					
Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Iron (III) chloride	7705-08-0	No	1000 lb RQ	1000 lb final RQ; 454 kg final RQ	No	No

California Prop 65:	No California Proposition 65 ingredients
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Section 16 Additional Information

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Revised: 08/21/2018

Replaces: 06/15/2018

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The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health