



SAFETY DATA SHEET

VWR ANALYTICAL

Issuing Date 23-Jul-2012

Revision Date 10-Feb-2015

Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name FERRIC CHLORIDE HEXAHYDRATE

Other means of identification

Product Code(s) BDH9234-500G

UN-No 3260

Synonyms No information available.

Recommended use of the chemical and restrictions on use

Recommended Use For Laboratory Use Only. Not for Drug, Food, or Household use.

Uses advised against Not for Human or Animal Drug Use

Details of the supplier of the safety data sheet

Company Address

VWR International, LLC
Radnor Corporate Center
100 Matsonford Road
Radnor, PA 19087-8660

Company Phone Number 610-386-1700

E-mail Address www.vwr.com

Emergency Telephone Number

Emergency Telephone Number CHEMTREC 800.424.9300
CANUTEC 613.996.6666

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Toxicity - Oral

Category 4

Label elements

Emergency Overview

Warning

Hazard Statements

H302 - Harmful if swallowed



Appearance Yellow Orange

Physical State Solid

Odor No information available

Precautionary Statements

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P330 - Rinse mouth

P501 - Dispose of contents/ container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
Iron (III) chloride hexahydrate	10025-77-1	-	95-100	Not applicable

4. FIRST AID MEASURES

First Aid Measures

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
Inhalation	Move to fresh air. If not breathing, give artificial respiration.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Chemical

Forms explosive mixtures with Sodium or Potassium.

**Hazardous Combustion
Products**

Hydrogen Chloride gas.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Ensure adequate ventilation, especially in confined areas.

Environmental Precautions

Environmental Precautions

See Section 12 for additional Ecological information.

Methods and material for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up

Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling

Handle in accordance with good industrial hygiene and safety practice. Hygroscopic. Protect from air. Needs to be packed under blanket layer of nitrogen. Weigh in dryroom only.

Conditions for safe storage, including any incompatibilities

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from air, light and moisture. Hygroscopic.

Incompatible Products

Strong oxidizing agents. Air. moisture. Potassium. Sodium.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Iron (III) chloride hexahydrate 10025-77-1	TWA: 1 mg/m ³	-	TWA: 1 mg/m ³

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Avoid contact with eyes. Safety glasses with side-shields.
Skin and Body Protection	Wear protective gloves/clothing.
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Solid	Odor	No information available
Appearance	Yellow Orange	Odor Threshold	No information available
Color	No information available		
Property	Values	Remarks • Method	
pH	No information available.		
Melting point/freezing point	37 °C		
Boiling Point/Range	No information available.		
Flash Point (High in °C)	No information available.		
Evaporation Rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper flammability limit:	No information available.		
Lower flammability limit:	No information available.		
Vapor pressure	No information available.		
Vapor Density	No information available.		
Specific Gravity	No information available		
Water Solubility	Very soluble in water		
Solubility in other solvents	No information available.		
Partition coefficient	No information available		
Autoignition Temperature			
Decomposition Temperature	No information available		
Kinematic viscosity	No information available		
Dynamic viscosity	No information available.		
Explosive Properties	No information available		
Oxidizing Properties	No information available		

Other Information

Softening Point	No information available.
Molecular Weight	No information available
VOC Content	No information available.
Density	No information available
Bulk Density	2.90

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Forms explosive mixtures with sodium or potassium.

Conditions to Avoid

Protect from air, light and moisture.

Incompatible Materials

Strong oxidizing agents. Air. moisture. Potassium. Sodium.

Hazardous Decomposition Products

Hydrogen chloride gas.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Toxic by inhalation and if swallowed Corrosive, causes burns

Inhalation There is no data available for this product.

Eye Contact There is no data available for this product.

Skin Contact There is no data available for this product.

Ingestion There is no data available for this product.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Iron (III) chloride hexahydrate 10025-77-1	= 900 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Iron (III) chloride hexahydrate 10025-77-1	-	-	-	-

Reproductive Toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target Organ Effects Liver.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Iron (III) chloride hexahydrate 10025-77-1	-	-	-

Persistence and Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical Name	Log Pow
Iron (III) chloride hexahydrate 10025-77-1	-

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method

Dispose of material in accordance with all federal, state, and local regulations.

Contaminated Packaging

Do not re-use empty containers.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Iron (III) chloride hexahydrate 10025-77-1	-	-	-	-

Chemical Name	California Hazardous Waste Status
Iron (III) chloride hexahydrate 10025-77-1	-

14. TRANSPORT INFORMATION

DOT

UN-No 3260
 Proper Shipping Name CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (CONTAINING FERRIC CHLORIDE, HEXAHYDRATE)
 Hazard Class 8
 Packing Group III

IATA

UN-No 3260
 Proper Shipping Name CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (CONTAINING FERRIC CHLORIDE, HEXAHYDRATE)
 Hazard Class 8
 Packing Group III

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
 DSL/NDL Does not comply
 EINECS/ELINCS Does not Comply
 ENCS Does not Comply
 IECSC Complies
 KECL Does not Comply
 PICCS Complies
 AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	SARA 313 - Threshold Values %
Iron (III) chloride hexahydrate 10025-77-1 (95-100)	-

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Iron (III) chloride hexahydrate 10025-77-1	-	-	-	-

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Iron (III) chloride hexahydrate 10025-77-1	-	-	-

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65
Iron (III) chloride hexahydrate - 10025-77-1	-

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Iron (III) chloride hexahydrate 10025-77-1	-	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Canada

WHMIS Hazard Class

D1B Toxic materials E Corrosive material



16. OTHER INFORMATION

Issuing Date

23-Jul-2012

Revision Date

10-Feb-2015

Revision Note

No information available

Disclaimer

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

End of Safety Data Sheet