

Revision: 1.2

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**Section 1. Identification****1.1 Product Identifier**

1122

Product Name

IRON (III) CHLORIDE 6H<sub>2</sub>O pure

CAS Number

10025-77-1

REACH Registration No

A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

Molecular Formula

FeCl<sub>3</sub> · 6H<sub>2</sub>O = 270.30**1.2 Relevant identified uses of the substance or mixture & uses advised against**

Uses of Material

Chemical for industrial and laboratory use. Not suitable for domestic use.

**1.3 Supplier**

Vickers Laboratories Ltd

Grangefield Industrial Estate  
Richardshaw Road  
Pudsey  
West Yorkshire  
LS28 6QW  
UNITED KINGDOM

Phone

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**1.4 Emergency Telephone**

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(24hr) 112

(Have this document to hand)

**Section 2. Hazards Identification****2.1 Classification of the substance or mixture****Classification according to regulation 1272/2008/EC**

Corrosive to metals, category 1

Acute toxicity, category 4 (oral)

Skin corrosion/irritation, category 2

Serious eye damage/irritation, category 1

H290: May be corrosive to metals.

H302: Harmful if swallowed.

H315: Causes skin irritation.

H318: Causes serious eye damage.

**2.2 Label elements****Labelling according to regulation 1272/2008/EC**

Signal word

Danger

Hazard Pictograms



Hazard Statements May be corrosive to metals. Harmful if swallowed. Causes skin irritation. Causes serious eye damage.

Precautionary Statements Wear protective gloves / protective clothing / eye protection. Wash thoroughly after handling. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

## Section 3. Composition

### 3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Iron (III) Chloride	10025-77-1	231-729-4		<100%	Met. Corr. 1, Acute Tox. 4 (O), Skin Irrit. 2, Eye Dam. 1

## Section 4. First Aid

### 4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.
Skin	Do not wash immediately with water but first remove any excess material with a dry cloth. Then wash off skin thoroughly with water. If discomfort persists OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure.
Ingestion	Wash out the patients mouth thoroughly with water. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

### 4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

### 4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

## Section 5. Fire Fighting

### 5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Nothing specified.

### 5.2 Special hazards arising from the substance or mixture

Hazards	Presents no specific fire danger.
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### 5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes.
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## Section 6. Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Use approved personal protective equipment. Beware : aqueous solutions are highly acidic.
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### 6.2 Environmental precautions

Environmental

Keep non-neutralised material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

### 6.3 Methods and material for containment and cleaning up

Major Spillage Shovel/sweep up into container for removal Wash area down with copious amounts of water.  
Minor Spillage Wash area down with copious amounts of water.

### 6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

## Section 7. Storage & Handling

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.  
Ensure Local Exhaust Ventilation maintains dust concentrations below the recommended limits.

### 7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Protect against moisture to prevent decomposition and corrosion.

### 7.3 Specific end use(s)

See section 1.2.

## Section 8. Workplace Exposure & Personal Protection

### 8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits		
			Long Term (8hr TWA)		Short Term 15min period
Iron (III) Chloride	10025-77-1	<100%	-	-	1.0 ppm 2.0 mg/m-3

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

### 8.2 Exposure controls

Respiratory Protection If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.  
Hand Protection Use nitrile gloves or PVC gauntlets.  
Eye Protection Use tightly fitting chemical splash proof glasses or goggles.  
Skin Protection Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.  
Special Hazards No special precautions required.

## Section 9. Physical & Chemical Properties

### 9.1 Information on basic physical and chemical properties

Appearance Yellowish brown crystalline solid.  
Odour Odourless.  
pH 2 @ 20°C  
Boiling Point 280°C  
Melting Point 37°C  
Flash Point Not applicable  
Upper Flammable Limit Not applicable  
Lower Flammable Limit Not applicable  
Auto Ignition Not applicable  
Explosive Properties No.  
Oxidising Properties Yes.  
Vapour Pressure Not applicable  
Relative Density 1.6600  
Water Solubility Completely soluble in water.

## 9.2 Other information

No data available.

## Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	No specific conditions.
10.5	Incompatible Materials	Alkalis.
10.6	Hazardous Decomposition Products	May produce hazardous fumes if involved in a fire.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Eyes	Contact with the solid or dust may cause severe irritation.
Skin	Contact with the solid or dust will be irritating to the skin.
LD50 Skin	Not available
Ingestion	Harmful if swallowed. Ingestion will cause gastrointestinal irritation.
LD50 Oral	900mg/kg Rat
Inhalation	Inhalation of dust may produce irritation of the eyes, nose, throat and respiratory tract.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

## Section 12. Ecological

12.1	Toxicity	No specific environmental hazard.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not available
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

## Section 13. Disposal Considerations

### 13.1 Waste treatment methods

Disposal Methods	Dispose of to a licensed land fill site.
Contaminated Packaging	Wash out containers with water. Use a licensed waste disposer.

## Section 14. Transport Information

<b>14.1 UN Number</b>	3260
<b>14.2 Proper Shipping Name</b>	Corrosive solid, acidic, inorganic, N.O.S. (Iron Trichloride Hexahydrate)
<b>14.3 Transport classes</b>	
UN classification	8
Subsidiary hazard(s)	None
Transport category	3
ADR Hazard ID	80
Tunnel Restriction Code	E
<b>14.4 Packing Group</b>	III
<b>14.5 Environment hazards</b>	See section 12.
<b>14.6 Special precautions for user</b>	No special precautions required.
<b>14.7 Transport in bulk</b>	Not transported in bulk.



## Section 15. Regulatory Information

### 15.1 Safety, health and environment regulations specific for substance/mixture.

#### Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Corrosive to metals, category 1; Acute toxicity, category 4 (oral); Skin corrosion/irritation, category 2; Serious eye damage/irritation, category 1

Signal word Danger

Hazard Pictograms



Hazard Statements H290, H302, H315, H318  
May be corrosive to metals. Harmful if swallowed. Causes skin irritation. Causes serious eye damage.

Precautionary Statements P280, P264, P305+P351+P338, P301+P312, P330  
Wear protective gloves / protective clothing / eye protection. Wash thoroughly after handling. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

### 15.2 Chemical safety assessment

Assessment not required.

## Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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