

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

|              |   |
|--------------|---|
| Product form | : Substance                                       |
| Trade name   | : UN1773 Iron (III) chloride anhydrous Extra Pure |
| IUPAC name   | : iron trichloride                                |
| EC-No.       | : 231-729-4                                       |
| CAS-No.      | : 7705-08-0                                       |
| Product code | : IRCH-A0T  |

**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.2.1. Relevant identified uses**

Main use category : Laboratory use

**1.2.2. Uses advised against**

No additional information available

**1.3. Details of the supplier of the safety data sheet**

labbox labware s.l.  
Migjorn, 1  
P.O. Box Barcelona (SPAIN)  
08338 Premia de Dalt – SPAIN  
ES  
T +34 937 07 79 70 - F +34 937 909 532  
[info@labbox.com](mailto:info@labbox.com) - [www.labbox.com](http://www.labbox.com)

**1.4. Emergency telephone number**

Emergency number : +34 937 077 970 (For technical information\_Office Hours) In case of medical emergency phone 112 or to your local emergency number.

| Country        | Organisation/Company  | Address                    | Emergency number | Comment |
|----------------|---|----------------------------|------------------|---------|
| United Kingdom | National Poisons Information Service<br>(Belfast Centre)<br>Royal Victoria Hospital | Grosvenor Road<br>BT12 6BA | 0344 892 0111    |         |

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

|   |      |
|---|------|
| Corrosive to metals, Category 1                   | H290 |
| Acute toxicity (oral), Category 4                 | H302 |
| Skin corrosion/irritation, Category 2             | H315 |
| Serious eye damage/eye irritation, Category 1     | H318 |
| Full text of H and EUH statements: see section 16 |      |

**Adverse physicochemical, human health and environmental effects**

No additional information available

# UN1773 Iron (III) chloride anhydrous Extra Pure

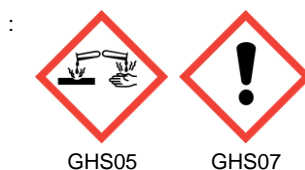
## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: H290 - May be corrosive to metals.  
H302 - Harmful if swallowed.  
H315 - Causes skin irritation.  
H318 - Causes serious eye damage.

Precautionary statements (CLP)

: P234 - Keep only in original container.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call a POISON CENTER or doctor/physician.  
P330 - Rinse mouth.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type

: Mono-constituent

| Name                          | Product identifier                      | %   |
|-------------------------------|---|-----|
| Iron (III) chloride anhydrous | CAS-No.: 7705-08-0<br>EC-No.: 231-729-4 | 100 |

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general

: Get medical advice/attention if you feel unwell.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact

: Gently wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid measures after ingestion

: Rinse mouth. Do not induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects after ingestion

: Swallowing a small quantity of this material will result in serious health hazard.

# UN1773 Iron (III) chloride anhydrous Extra Pure

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

Never give anything by mouth to an unconscious person.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : ABC-powder.  
Unsuitable extinguishing media : Strong water jet.

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

No additional information available

### 5.3. Advice for firefighters

Precautionary measures fire : Stop leak if safe to do so.  
Firefighting instructions : Exercise caution when fighting any chemical fire.  
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

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

General measures : Evacuate area.

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.  
Measures in case of dust release : Do not breathe dust.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection.  
Emergency procedures : Stop release.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters.

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

For containment : Collect spillage.  
Methods for cleaning up : On land, sweep or shovel into suitable containers.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

See Heading 8. For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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

Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in a well-ventilated place. Keep container tightly closed.  
Special rules on packaging : Keep only in original container. Store in a closed container.

# UN1773 Iron (III) chloride anhydrous Extra Pure

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 7.3. Specific end use(s)

Laboratory chemicals.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

| UN1773 Iron (III) chloride anhydrous Extra Pure (7705-08-0) |                           |
|---|---------------------------|
| <b>DNEL/DMEL (Workers)</b>                                  |                           |
| Long-term - systemic effects, dermal                        | 2,8 mg/kg bodyweight/day  |
| <b>DNEL/DMEL (General population)</b>                       |                           |
| Acute - systemic effects, oral                              | 20 mg/kg bodyweight/day   |
| Long-term - systemic effects, oral                          | 0,28 mg/kg bodyweight/day |
| Long-term - systemic effects, dermal                        | 1,4 mg/kg bodyweight/day  |

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

No additional information available

#### 8.2.2. Personal protection equipment

##### Personal protective equipment:

Avoid all unnecessary exposure. EN 374.

##### Personal protective equipment symbol(s):



##### 8.2.2.1. Eye and face protection

##### Eye protection:

Safety glasses

| Eye protection |                      |                 |          |
|----------------|----------------------|-----------------|----------|
| Type           | Field of application | Characteristics | Standard |
| Category II    |                      |                 | EN 166   |

##### 8.2.2.2. Skin protection

##### Skin and body protection:

Wear suitable protective clothing

# UN1773 Iron (III) chloride anhydrous Extra Pure

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Skin and body protection |          |
|--------------------------|----------|
| Type                     | Standard |
| Protective clothing      |          |

### Hand protection:

protective gloves

| Hand protection |          |            |                |             |          |
|-----------------|----------|------------|----------------|-------------|----------|
| Type            | Material | Permeation | Thickness (mm) | Penetration | Standard |
| Category I      |          |            |                |             |          |

| Other skin protection             |          |              |
|-----------------------------------|----------|--------------|
| Materials for protective clothing |          |              |
| Condition                         | Material | Standard     |
|                                   |          | EN ISO 20347 |

### 8.2.2.3. Respiratory protection

#### Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

#### Consumer exposure controls:

Avoid contact during pregnancy/while nursing.

#### Other information:

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|   |                  |
|---|------------------|
| Physical state                                  | : Solid          |
| Colour  | : Not available  |
| Odour   | : Not available  |
| Odour threshold                                 | : Not available  |
| Melting point                                   | : 304 °C         |
| Freezing point                                  | : Not available  |
| Boiling point                                   | : 316 °C         |
| Flammability                                    | : Not available  |
| Explosive limits                                | : Not applicable |
| Lower explosion limit                           | : Not applicable |
| Upper explosion limit                           | : Not applicable |
| Flash point                                     | : Not applicable |
| Auto-ignition temperature                       | : Not applicable |
| Decomposition temperature                       | : Not available  |
| pH  | : Not available  |
| pH solution                                     | : Not available  |
| Viscosity, kinematic                            | : Not applicable |
| Solubility                                      | : Not available  |
| Partition coefficient n-octanol/water (Log Kow) | : Not available  |
| Vapour pressure                                 | : Not available  |
| Vapour pressure at 50 °C                        | : 3000 hPa       |

# UN1773 Iron (III) chloride anhydrous Extra Pure

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

|                                  |  |
|----------------------------------|--|
| Density                          | : 3,65 g/cm <sup>3</sup> Type: 'density' |
| Relative density                 | : Not available                          |
| Relative vapour density at 20 °C | : Not applicable                         |
| Particle size                    | : Not available                          |

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

VOC content : 0 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable in use and storage conditions as recommended in item 7.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Carbon dioxide. fume. Carbon monoxide.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

|                             |                         |
|-----------------------------|-------------------------|
| Acute toxicity (oral)       | : Harmful if swallowed. |
| Acute toxicity (dermal)     | : Not classified        |
| Acute toxicity (inhalation) | : Not classified        |

#### UN1773 Iron (III) chloride anhydrous Extra Pure (7705-08-0)

|               |            |
|---------------|------------|
| LD50 oral rat | 1872 mg/kg |
|---------------|------------|

|                                   |                              |
|-----------------------------------|------------------------------|
| Skin corrosion/irritation         | : Causes skin irritation.    |
| Serious eye damage/irritation     | : Causes serious eye damage. |
| Respiratory or skin sensitisation | : Not classified             |
| Germ cell mutagenicity            | : Not classified             |
| Carcinogenicity                   | : Not classified             |
| Reproductive toxicity             | : Not classified             |
| STOT-single exposure              | : Not classified             |
| STOT-repeated exposure            | : Not classified             |
| Aspiration hazard                 | : Not classified             |

### 11.2. Information on other hazards

No additional information available

# UN1773 Iron (III) chloride anhydrous Extra Pure

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 12: Ecological information

#### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

#### UN1773 Iron (III) chloride anhydrous Extra Pure (7705-08-0)

|                    |          |
|--------------------|----------|
| EC50 - Daphnia [1] | 117 mg/l |
|--------------------|----------|

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

|                              |   |
|------------------------------|---|
| Regional legislation (waste) | : Disposal must be done according to official regulations.  |
| Waste treatment methods      | : Must follow special treatment according to local regulation.  |
| Ecology - waste materials    | : Avoid release to the environment. Hazardous waste due to toxicity.  |
| HP Code                      | : HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.<br>HP4 - "Irritant — skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye. |

### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

#### 14.1. UN number or ID number

|               |           |
|---------------|-----------|
| UN-No. (ADR)  | : UN 1773 |
| UN-No. (IMDG) | : UN 1773 |
| UN-No. (IATA) | : UN 1773 |
| UN-No. (ADN)  | : UN 1773 |
| UN-No. (RID)  | : UN 1773 |

#### 14.2. UN proper shipping name

|                             |                              |
|-----------------------------|------------------------------|
| Proper Shipping Name (ADR)  | : FERRIC CHLORIDE, ANHYDROUS |
| Proper Shipping Name (IMDG) | : Not applicable             |
| Proper Shipping Name (IATA) | : Ferric chloride, anhydrous |

# UN1773 Iron (III) chloride anhydrous Extra Pure

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

|                                       |   |
|---------------------------------------|---|
| Proper Shipping Name (ADN)            | : FERRIC CHLORIDE, ANHYDROUS                      |
| Proper Shipping Name (RID)            | : FERRIC CHLORIDE, ANHYDROUS                      |
| Transport document description (ADR)  | : UN 1773 FERRIC CHLORIDE, ANHYDROUS, 8, III, (E) |
| Transport document description (IMDG) | : UN 1773 , III                                   |
| Transport document description (IATA) | : UN 1773 Ferric chloride, anhydrous, 8, III      |
| Transport document description (ADN)  | : UN 1773 FERRIC CHLORIDE, ANHYDROUS, 8, III      |
| Transport document description (RID)  | : UN 1773 FERRIC CHLORIDE, ANHYDROUS, 8, III      |

### 14.3. Transport hazard class(es)

#### ADR

|                                  |     |
|----------------------------------|-----|
| Transport hazard class(es) (ADR) | : 8 |
| Danger labels (ADR)              | : 8 |



#### IMDG

|                                   |                  |
|-----------------------------------|------------------|
| Transport hazard class(es) (IMDG) | : Not applicable |
|-----------------------------------|------------------|

#### IATA

|                                   |     |
|-----------------------------------|-----|
| Transport hazard class(es) (IATA) | : 8 |
| Danger labels (IATA)              | : 8 |



#### ADN

|                                  |     |
|----------------------------------|-----|
| Transport hazard class(es) (ADN) | : 8 |
| Danger labels (ADN)              | : 8 |



#### RID

|                                  |     |
|----------------------------------|-----|
| Transport hazard class(es) (RID) | : 8 |
| Danger labels (RID)              | : 8 |



### 14.4. Packing group

|                      |       |
|----------------------|-------|
| Packing group (ADR)  | : III |
| Packing group (IMDG) | : III |
| Packing group (IATA) | : III |
| Packing group (ADN)  | : III |
| Packing group (RID)  | : III |

### 14.5. Environmental hazards

|                               |  |
|-------------------------------|--|
| Dangerous for the environment | : No                                     |
| Marine pollutant              | : No                                     |
| Other information             | : No supplementary information available |




# UN1773 Iron (III) chloride anhydrous Extra Pure

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 14.6. Special precautions for user

#### Overland transport

|   |   |
|---|---|
| Classification code (ADR)                                 | : C2  |
| Special provisions (ADR)                                  | : 590   |
| Limited quantities (ADR)                                  | : 5kg   |
| Excepted quantities (ADR)                                 | : E1  |
| Packing instructions (ADR)                                | : P002, IBC08, LP02, R001   |
| Special packing provisions (ADR)                          | : B3  |
| Mixed packing provisions (ADR)                            | : MP10  |
| Portable tank and bulk container instructions (ADR)       | : T1  |
| Portable tank and bulk container special provisions (ADR) | : TP33  |
| Tank code (ADR)   | : SGAV  |
| Vehicle for tank carriage                                 | : AT  |
| Transport category (ADR)                                  | : 3   |
| Special provisions for carriage - Bulk (ADR)              | : VV9   |
| Hazard identification number (Kemler No.)                 | : 80  |
| Orange plates   | :  |
| Tunnel restriction code (ADR)                             | : E   |
| EAC code  | : 2X  |

#### Transport by sea

No data available

#### Air transport

|  |         |
|--|---------|
| PCA Excepted quantities (IATA)               | : E1    |
| PCA Limited quantities (IATA)                | : Y845  |
| PCA limited quantity max net quantity (IATA) | : 5kg   |
| PCA packing instructions (IATA)              | : 860   |
| PCA max net quantity (IATA)                  | : 25kg  |
| CAO packing instructions (IATA)              | : 864   |
| CAO max net quantity (IATA)                  | : 100kg |
| ERG code (IATA)                              | : 8L    |

#### Inland waterway transport

|                                   |          |
|-----------------------------------|----------|
| Classification code (ADN)         | : C2     |
| Special provisions (ADN)          | : 59     |
| Limited quantities (ADN)          | : 5 kg   |
| Excepted quantities (ADN)         | : E1     |
| Equipment required (ADN)          | : PP, EP |
| Number of blue cones/lights (ADN) | : 0      |

#### Rail transport

|   |                           |
|---|---------------------------|
| Classification code (RID)                                 | : C2                      |
| Special provisions (RID)                                  | : 590                     |
| Limited quantities (RID)                                  | : 5kg                     |
| Excepted quantities (RID)                                 | : E1                      |
| Packing instructions (RID)                                | : P002, IBC08, LP02, R001 |
| Special packing provisions (RID)                          | : B3                      |
| Mixed packing provisions (RID)                            | : MP10                    |
| Portable tank and bulk container instructions (RID)       | : T1                      |
| Portable tank and bulk container special provisions (RID) | : TP33                    |
| Tank codes for RID tanks (RID)                            | : SGAV                    |
| Transport category (RID)                                  | : 3                       |
| Special provisions for carriage – Bulk (RID)              | : VV9                     |
| Colis express (express parcels) (RID)                     | : CE11                    |
| Hazard identification number (RID)                        | : 80                      |

# UN1773 Iron (III) chloride anhydrous Extra Pure

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

##### REACH Annex XVII (Restriction List)

No REACH Annex XVII restrictions

##### REACH Annex XIV (Authorisation List)

UN1773 Iron (III) chloride anhydrous Extra Pure is not on the REACH Annex XIV List

##### REACH Candidate List (SVHC)

UN1773 Iron (III) chloride anhydrous Extra Pure is not on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

UN1773 Iron (III) chloride anhydrous Extra Pure is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

##### POP Regulation (Persistent Organic Pollutants)

UN1773 Iron (III) chloride anhydrous Extra Pure is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

##### Ozone Regulation (1005/2009)

Iron (III) chloride anhydrous is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

##### VOC Directive (2004/42)

VOC content : 0 %

##### Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

##### Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

#### 15.1.2. National regulations

##### Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to VwVwS, Annex 1 or 2; ID No. 515).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Borstvoeding

NIET-limitatieve lijst van voor de voortplanting : The substance is not listed

giftige stoffen – Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting : The substance is not listed

giftige stoffen – Ontwikkeling

##### Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

### 15.2. Chemical safety assessment

No additional information available

# UN1773 Iron (III) chloride anhydrous Extra Pure

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 16: Other information

#### Full text of H- and EUH-statements:

|                     |   |
|---------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4             |
| Eye Dam. 1          | Serious eye damage/eye irritation, Category 1 |
| H290                | May be corrosive to metals.                   |
| H302                | Harmful if swallowed.                         |
| H315                | Causes skin irritation.                       |
| H318                | Causes serious eye damage.                    |
| Met. Corr. 1        | Corrosive to metals, Category 1               |
| Skin Irrit. 2       | Skin corrosion/irritation, Category 2         |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.