

Creation Date 08-Feb-2010

Revision Date 28-Aug-2025

Revision Number 12

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

|                           |                                                |
|---------------------------|------------------------------------------------|
| Product Description:      | <b>Iron (III) chloride hexahydrated</b>        |
| Cat No. :                 | <b>I/1020/65, I/1020/60</b>                    |
| Synonyms                  | Ferric chloride hexahydrate                    |
| CAS No                    | 10025-77-1                                     |
| Molecular Formula         | Cl <sub>3</sub> Fe . 6 H <sub>2</sub> O        |
| REACH registration number | 01-2119497998-05-0065 (for the anhydrous form) |

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

|                                |                                                                                             |
|--------------------------------|---------------------------------------------------------------------------------------------|
| Recommended Use                | Laboratory chemicals                                                                        |
| Sector of use                  | SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites    |
| Product category               | PC21 - Laboratory chemicals                                                                 |
| Process categories             | PROC15 - Use as a laboratory reagent                                                        |
| Environmental release category | ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates) |
| Uses advised against           | No Information available                                                                    |

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

#### Company

**UK entity/business name**  
Fisher Scientific UK  
Bishop Meadow Road, Loughborough,  
Leicestershire LE11 5RG, United Kingdom

**EU entity/business name**  
Thermo Fisher Scientific  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

### 1.4. Emergency telephone number

Chemtrec US: (800) 424-9300  
Chemtrec EU: 001-703-527-3887  
Tel: 01509 231166

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Physical hazards

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Based on available data, the classification criteria are not met

## Health hazards

Acute oral toxicity  
Skin Corrosion/Irritation  
Serious Eye Damage/Eye Irritation

Category 4 (H302)  
Category 2 (H315)  
Category 1 (H318)

## Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

## 2.2. Label elements



Signal Word

Danger

## Hazard Statements

H302 - Harmful if swallowed  
H315 - Causes skin irritation  
H318 - Causes serious eye damage

## Precautionary Statements

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
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  
P280 - Wear protective gloves/protective clothing/eye protection/face protection

## 2.3. Other hazards

Toxic to terrestrial vertebrates  
This product does not contain any known or suspected endocrine disruptors

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

| Component                       | CAS No     | EC No             | Weight % | GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567 |
|---------------------------------|------------|-------------------|----------|-----------------------------------------------------------------------------------------|
| Iron (III) chloride hexahydrate | 10025-77-1 |                   | <=100    | Acute Tox. 4 (H302)<br>Skin Irrit. 2 (H315)<br>Eye Dam. 1 (H318)                        |
| Iron(III) chloride              | 7705-08-0  | EEC No. 231-729-4 | -        | Acute Tox. 4 (H302)                                                                     |

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|  |  |  |  |                                           |
|--|--|--|--|-------------------------------------------|
|  |  |  |  | Skin Irrit. 2 (H315)<br>Eye Dam. 1 (H318) |
|--|--|--|--|-------------------------------------------|

|                           |                                                |
|---------------------------|------------------------------------------------|
| REACH registration number | 01-2119497998-05-0065 (for the anhydrous form) |
|---------------------------|------------------------------------------------|

Full text of Hazard Statements: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

|                                    |                                                                                                                                                  |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| General Advice                     | If symptoms persist, call a physician.                                                                                                           |
| Eye Contact                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.                                  |
| Skin Contact                       | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.                                |
| Ingestion                          | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.                                            |
| Inhalation                         | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.                                     |
| Self-Protection of the First Aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. |

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

None reasonably foreseeable. Causes severe eye damage. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

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

|                    |                        |
|--------------------|------------------------|
| Notes to Physician | Treat symptomatically. |
|--------------------|------------------------|

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam.

#### Extinguishing media which must not be used for safety reasons

No information available.

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

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. May ignite combustibles (wood, paper, oil, clothing, etc.). In the event of fire and/or explosion do not breathe fumes. Keep product and empty container away from heat and sources of ignition.

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## Hazardous Combustion Products

Chlorine, Metal oxides, Hydrogen chloride gas.

### 5.3. Advice for firefighters

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

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Use personal protective equipment as required. Avoid dust formation. Ensure adequate ventilation.

### 6.2. Environmental precautions

Should not be released into the environment. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

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

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Ensure adequate ventilation. Avoid ingestion and inhalation.

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

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

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep away from water or moist air. Store under an inert atmosphere. Air sensitive.

Technical Rules for Hazardous Substances (TRGS) 510  
Storage Class (LGK) (Germany)

Class 13

### 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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## 8.1. Control parameters

### Exposure limits

List source(s): **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020.

| Component                       | The United Kingdom                                                | European Union | Ireland |
|---------------------------------|-------------------------------------------------------------------|----------------|---------|
| Iron (III) chloride hexahydrate | STEL: 2 mg/m <sup>3</sup> 15 min<br>TWA: 1 mg/m <sup>3</sup> 8 hr |                |         |
| Iron(III) chloride              | STEL: 2 mg/m <sup>3</sup> 15 min<br>TWA: 1 mg/m <sup>3</sup> 8 hr |                |         |

### Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

### Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

No information available

### Predicted No Effect Concentration (PNEC)

No information available.

## 8.2. Exposure controls

### Engineering Measures

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

### Personal protective equipment

#### Eye Protection

Goggles (European standard - EN 166)

#### Hand Protection

Protective gloves

| Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments        |
|----------------|-------------------|-----------------|-------------|-----------------------|
| Natural rubber | See manufacturers | -               | EN 374      | (minimum requirement) |
| Nitrile rubber | recommendations   |                 |             |                       |
| Neoprene       |                   |                 |             |                       |
| PVC            |                   |                 |             |                       |

#### Skin and body protection

Long sleeved clothing.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

#### Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

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|                                        |                                                                                                                                                                                                                                                                                          |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Large scale/emergency use</b>       | Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced<br><b>Recommended Filter type:</b> Particulates filter conforming to EN 143                                                          |
| <b>Small scale/Laboratory use</b>      | Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.<br><b>Recommended half mask:-</b> Particle filtering: EN149:2001<br>When RPE is used a face piece Fit Test should be conducted |
| <b>Environmental exposure controls</b> | No information available.                                                                                                                                                                                                                                                                |

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

|                                                |                             |                                          |
|------------------------------------------------|-----------------------------|------------------------------------------|
| <b>Physical State</b>                          | Solid                       |                                          |
| <b>Appearance</b>                              | Dark yellow                 |                                          |
| <b>Odor</b>                                    | No information available    |                                          |
| <b>Odor Threshold</b>                          | No data available           |                                          |
| <b>Melting Point/Range</b>                     | 37 °C / 98.6 °F             |                                          |
| <b>Softening Point</b>                         | No data available           |                                          |
| <b>Boiling Point/Range</b>                     | 280 - 285 °C / 536 - 545 °F |                                          |
| <b>Flammability (liquid)</b>                   | Not applicable              | Solid                                    |
| <b>Flammability (solid,gas)</b>                | No information available    |                                          |
| <b>Explosion Limits</b>                        | No data available           |                                          |
| <b>Flash Point</b>                             | Not applicable              | <b>Method -</b> No information available |
| <b>Autoignition Temperature</b>                | No data available           |                                          |
| <b>Decomposition Temperature</b>               | No data available           |                                          |
| <b>pH</b>                                      | 2                           | 0.1M in water                            |
| <b>Viscosity</b>                               | Not applicable              | Solid                                    |
| <b>Water Solubility</b>                        | 920 g/l (20°C)              |                                          |
| <b>Solubility in other solvents</b>            | No information available    |                                          |
| <b>Partition Coefficient (n-octanol/water)</b> |                             |                                          |
| <b>Component</b>                               | <b>log Pow</b>              |                                          |
| Iron (III) chloride hexahydrate                | 4                           |                                          |
| Iron(III) chloride                             | -4                          |                                          |
| <b>Vapor Pressure</b>                          | negligible                  |                                          |
| <b>Density / Specific Gravity</b>              | 1.82 (H2O=1)                |                                          |
| <b>Bulk Density</b>                            | No data available           |                                          |
| <b>Vapor Density</b>                           | Not applicable              | Solid                                    |
| <b>Particle characteristics</b>                | No data available           |                                          |

### 9.2. Other information

|                          |                        |
|--------------------------|------------------------|
| <b>Molecular Formula</b> | Cl3 Fe . 6 H2 O        |
| <b>Molecular Weight</b>  | 270.29                 |
| <b>Evaporation Rate</b>  | Not applicable - Solid |

## SECTION 10: STABILITY AND REACTIVITY

|                         |                                            |
|-------------------------|--------------------------------------------|
| <b>10.1. Reactivity</b> | None known, based on information available |
|-------------------------|--------------------------------------------|

|                                 |              |
|---------------------------------|--------------|
| <b>10.2. Chemical stability</b> | Hygroscopic. |
|---------------------------------|--------------|

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## 10.3. Possibility of hazardous reactions

### Hazardous Polymerization Hazardous Reactions

Hazardous polymerization does not occur.  
None under normal processing.

## 10.4. Conditions to avoid

Avoid dust formation. Incompatible products. Excess heat. Exposure to air or moisture over prolonged periods. Exposure to moist air or water.

## 10.5. Incompatible materials

Strong oxidizing agents. Metals. Strong bases.

## 10.6. Hazardous decomposition products

Chlorine. Metal oxides. Hydrogen chloride gas.

## SECTION 11: TOXICOLOGICAL INFORMATION

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

#### Product Information

#### (a) acute toxicity;

Oral

Category 4

Dermal

No data available

Inhalation

No data available

| Component                       | LD50 Oral                              | LD50 Dermal | LC50 Inhalation |
|---------------------------------|----------------------------------------|-------------|-----------------|
| Iron (III) chloride hexahydrate | LD50 = 900 mg/kg ( Rat )               | -           | -               |
| Iron(III) chloride              | 450 mg/kg ( Rat )<br>316 mg/kg ( Rat ) | -           | -               |

#### (b) skin corrosion/irritation;

Category 2

#### (c) serious eye damage/irritation;

Category 1

#### (d) respiratory or skin sensitization;

Respiratory

No data available

Skin

No data available

No information available

#### (e) germ cell mutagenicity;

No data available

#### (f) carcinogenicity;

No data available

There are no known carcinogenic chemicals in this product

#### (g) reproductive toxicity;

No data available

#### (h) STOT-single exposure;

No data available

#### (i) STOT-repeated exposure;

No data available

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**Target Organs** None known.

**(j) aspiration hazard;** Not applicable  
Solid

**Symptoms / effects, both acute and delayed** Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

## 11.2. Information on other hazards

**Endocrine Disrupting Properties** Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

**Ecotoxicity effects** Do not empty into drains. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

| Component                       | Freshwater Fish                                                                                                                          | Water Flea                                                                                   | Freshwater Algae |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------|
| Iron (III) chloride hexahydrate | 22 mg/l 96H (anh subst)                                                                                                                  | 9.6 mg/l 48H (anh subst)                                                                     |                  |
| Iron(III) chloride              | LC50: 20.95 - 22.56 mg/L, 96h<br>semi-static (Pimephales<br>promelas)<br>LC50: = 20.26 mg/L, 96h<br>semi-static (Lepomis<br>macrochirus) | EC50: = 9.6 mg/L, 48h Static<br>(Daphnia magna)<br>EC50: = 27.9 mg/L, 48h<br>(Daphnia magna) |                  |

**12.2. Persistence and degradability** Product contains heavy metals. Discharge into the environment must be avoided. Special pre-treatment is necessary  
**Persistence** May persist.  
**Degradability** Not relevant for inorganic substances.  
**Degradation in sewage treatment plant** Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

**12.3. Bioaccumulative potential** Product has a high potential to bioconcentrate

| Component                       | log Pow | Bioconcentration factor (BCF) |
|---------------------------------|---------|-------------------------------|
| Iron (III) chloride hexahydrate | 4       | No data available             |
| Iron(III) chloride              | -4      | 2756 - 9622 dimensionless     |

**12.4. Mobility in soil** The product is water soluble, and may spread in water systems. Will likely be mobile in the environment due to its water solubility. Is not likely mobile in the environment due to its low water solubility and propensity to bind to soil particles

**12.5. Results of PBT and vPvB assessment** No data available for assessment.

### 12.6. Endocrine disrupting properties

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors

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## 12.7. Other adverse effects

**Persistent Organic Pollutant**  
**Ozone Depletion Potential**

This product does not contain any known or suspected substance  
This product does not contain any known or suspected substance

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste from Residues/Unused Products**

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

**Contaminated Packaging**

Dispose of this container to hazardous or special waste collection point.

**European Waste Catalogue (EWC)**

According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

**Other Information**

Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not flush to sewer. Solutions with low pH-value must be neutralized before discharge.

## SECTION 14: TRANSPORT INFORMATION

### IMDG/IMO

14.1. UN number

UN3260

14.2. UN proper shipping name

CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.

Technical Shipping Name

Iron(III) chloride hexahydrate

14.3. Transport hazard class(es)

8

14.4. Packing group

III

### ADR

14.1. UN number

UN3260

14.2. UN proper shipping name

CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.

Technical Shipping Name

Iron(III) chloride hexahydrate

14.3. Transport hazard class(es)

8

14.4. Packing group

III

### IATA

14.1. UN number

UN3260

14.2. UN proper shipping name

CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.

Technical Shipping Name

Iron(III) chloride hexahydrate

14.3. Transport hazard class(es)

8

14.4. Packing group

III

14.5. Environmental hazards

No hazards identified

14.6. Special precautions for user

No special precautions required.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable, packaged goods

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## SECTION 15: REGULATORY INFORMATION

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

#### International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component                       | CAS No     | EINECS    | ELINCS | NLP | IECSC | TCSI | KECL     | ENCS | ISHL |
|---------------------------------|------------|-----------|--------|-----|-------|------|----------|------|------|
| Iron (III) chloride hexahydrate | 10025-77-1 | -         | -      | -   | X     | X    | -        | X    | -    |
| Iron(III) chloride              | 7705-08-0  | 231-729-4 | -      | -   | X     | X    | KE-21134 | X    | X    |

| Component                       | CAS No     | TSCA | TSCA Inventory notification - Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|---------------------------------|------------|------|-----------------------------------------------|-----|------|------|-------|-------|
| Iron (III) chloride hexahydrate | 10025-77-1 | -    | -                                             | -   | -    | X    | X     | X     |
| Iron(III) chloride              | 7705-08-0  | X    | ACTIVE                                        | X   | -    | X    | X     | X     |

Legend: X - Listed '-' - Not Listed

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

#### Authorisation/Restrictions according to EU REACH

Not applicable

| Component                       | CAS No     | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|---------------------------------|------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Iron (III) chloride hexahydrate | 10025-77-1 | -                                                                   | -                                                                             | -                                                                                                     |
| Iron(III) chloride              | 7705-08-0  | -                                                                   | -                                                                             | -                                                                                                     |

#### Seveso III Directive (2012/18/EC)

| Component                       | CAS No     | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|---------------------------------|------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Iron (III) chloride hexahydrate | 10025-77-1 | Not applicable                                                                            | Not applicable                                                                           |
| Iron(III) chloride              | 7705-08-0  | Not applicable                                                                            | Not applicable                                                                           |

#### Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

#### Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

#### National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

#### WGK Classification

See table for values

| Component | Germany - Water Classification (AwSV) | Germany - TA-Luft Class |
|-----------|---------------------------------------|-------------------------|
|-----------|---------------------------------------|-------------------------|

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|                    |      |  |
|--------------------|------|--|
| Iron(III) chloride | WGK1 |  |
|--------------------|------|--|

## 15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

## SECTION 16: OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed

H315 - Causes skin irritation

H318 - Causes serious eye damage

### Legend

**CAS** - Chemical Abstracts Service

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

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

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

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

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer  
Predicted No Effect Concentration (PNEC)

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

### Key literature references and sources for data

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadviser - LOLI, Merck index, RTECS

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**ATE** - Acute Toxicity Estimate

**VOC** - (Volatile Organic Compound)

### Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

### Prepared By

Regulatory Affairs

### Creation Date

08-Feb-2010

### Revision Date

28-Aug-2025

### Revision Summary

SDS sections updated.

**This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as**

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amended. .

## Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of Safety Data Sheet**