

# FERRIC CHLORIDE 40% w/v SOLUTION

## SafetyDataSheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Issue date: 25/03/2026 Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

|                 |                                    |
|-----------------|------------------------------------|
| Product form    | : Mixture                          |
| Trade name      | : FERRIC CHLORIDE 40% w/v SOLUTION |
| Product code    | : 3820D                            |
| Type of product | : Solution                         |
| Synonyms        | : Iron (III) chloride 40% Solution |

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

##### Relevant identified uses

|                              |                                        |
|------------------------------|----------------------------------------|
| Use of the substance/mixture | : Industrial;For professional use only |
| Use of the substance/mixture | : Laboratory chemicals                 |
|                              | Reagent                                |

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

Perumal Chem Tech  
Opp. Rajhans Fila, Pipodara  
Gujarat  
INDIA  
M +91 82642 80000  
[info.perumalchemtech@gmail.com](mailto:info.perumalchemtech@gmail.com)

#### 1.4. Emergency telephone number

Emergency number : + 91 82642 80000 (9:00am - 6:00 pm)

### 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 1 | H314 |

Full text of H- and EUH-statements: see section 16

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

May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage.

#### 2.2. Label elements

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

Hazard pictograms (CLP)



GHS05

GHS07

Signal word (CLP)

: Danger

Contains

: FERRIC CHLORIDE ANHYDROUS

Hazard statements (CLP)

: H290 - May be corrosive to metals.  
H302 - Harmful if swallowed.  
H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP)

: P234 - Keep only in original packaging.  
P280 - Wear protective gloves, protective clothing, eye protection, face protection.  
P301+P312 - IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.  
P302+P352 - IF ON SKIN: Wash with plenty of water.

# FERRIC CHLORIDE 40% w/v SOLUTION

## Safety Data Sheet

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



P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### 2.3. Other hazards

Contains no PBT and/or vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

| Name                      | Product identifier                      | %       | Classification according to Regulation (EC) No. 1272/2008 [CLP]                            |
|---------------------------|-----------------------------------------|---------|--------------------------------------------------------------------------------------------|
| WATER                     | CAS-No.: 7732-18-5<br>EC-No.: 231-791-2 | 59 – 61 | Not classified                                                                             |
| FERRIC CHLORIDE ANHYDROUS | CAS-No.: 7705-08-0<br>EC-No.: 231-729-4 | 39 – 41 | Met. Corr. 1, H290<br>Acute Tox. 4 (Oral), H302<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318 |

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                                       |                                                                                                                                                                    |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| First-aid measures general            | : Call a physician immediately.                                                                                                                                    |
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.      |
| First-aid measures after skin contact | : Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Rinse skin with water/shower. Call a physician immediately.           |
| First-aid measures after eye contact  | : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. Call a physician immediately.               |
| First-aid measures after ingestion    | : Rinse mouth. Do not induce vomiting because of corrosive effects. If you feel unwell, seek medical advice. Do not induce vomiting. Call a physician immediately. |
| Self protection of the first-aider    | : First aid workers will be equipped with suitable personal protective equipment.                                                                                  |

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

|                                     |                                 |
|-------------------------------------|---------------------------------|
| Symptoms/effects after inhalation   | : None under normal conditions. |
| Symptoms/effects after skin contact | : Burns.                        |
| Symptoms/effects after eye contact  | : Serious damage to eyes.       |
| Symptoms/effects after ingestion    | : Harmful if swallowed. Burns.  |

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

|                                |                                                                                                                                  |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Suitable extinguishing media   | : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO <sub>2</sub> ). Water spray. Dry powder. Foam. Carbon dioxide. |
| Unsuitable extinguishing media | : Do not use a heavy water stream.                                                                                               |

# FERRIC CHLORIDE 40% w/v SOLUTION

## Safety Data Sheet

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

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

|                                                  |                                |
|--------------------------------------------------|--------------------------------|
| Fire hazard                                      | : No fire hazard.              |
| Explosion hazard                                 | : No direct explosion hazard.  |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |

### 5.3. Advice for firefighters

|                                |                                                                                                                                                       |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Firefighting instructions      | : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.              |

## SECTION 6: Accidental release measures

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

|                                    |                                                                                                                                                                                                            |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General measures                   | : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.                                                                    |
| <b>For non-emergency personnel</b> |                                                                                                                                                                                                            |
| Protective equipment               | : Wear recommended personal protective equipment.                                                                                                                                                          |
| Emergency procedures               | : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.                                                              |
| <b>For emergency responders</b>    |                                                                                                                                                                                                            |
| Protective equipment               | : Do not attempt to take action without suitable protective equipment. Use personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures               | : Ventilate area. Evacuate unnecessary personnel. Stop leak if safe to do so.                                                                                                                              |

### 6.2. Environmental precautions

Avoid release to the environment.

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

|                         |                                                                                                                                                                                                                |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For containment         | : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.                          |
| Methods for cleaning up | : Take up liquid spill into absorbent material. Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. |
| Other information       | : Dispose of materials or solid residues at an authorized site.                                                                                                                                                |

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

|                                   |                                                                                                                                                                                                                                                                    |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Additional hazards when processed | : Not expected to present a significant hazard under anticipated conditions of normal use.                                                                                                                                                                         |
| Precautions for safe handling     | : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.                                                                                              |
| Hygiene measures                  | : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

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

|                    |                                                                                                                                                                                                            |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Technical measures | : Keep in a cool, well-ventilated place away from heat.                                                                                                                                                    |
| Storage conditions | : Keep container tightly closed. Store in a dry place. Store in a closed container. Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store locked up. |

# FERRIC CHLORIDE 40% w/v SOLUTION

## Safety Data Sheet

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

Incompatible materials : Metals.  
Packaging materials : Store always product in container of same material as original container.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

#### Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Personal protection equipment

#### Personal protective equipment:

Wear recommended personal protective equipment.

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



#### Eye and face protection

#### Eye protection:

Chemical goggles or safety glasses

#### Skin protection

#### Skin and body protection:

Wear a mask

#### Hand protection:

Protective gloves

#### Respiratory protection

#### Respiratory protection:

Wear appropriate mask

#### Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

|                       |                                 |
|-----------------------|---------------------------------|
| Physical state        | : Liquid                        |
| Colour                | : amber.                        |
| Appearance            | : Clear liquid.                 |
| Odour                 | : Odourless.                    |
| Odour threshold       | : Not available                 |
| Melting point         | : Not applicable                |
| Freezing point        | : Not available                 |
| Boiling point         | : $\approx 105^{\circ}\text{C}$ |
| Flammability          | : Non flammable.                |
| Lower explosion limit | : Not available                 |
| Upper explosion limit | : Not available                 |

# FERRIC CHLORIDE 40% w/v SOLUTION

## Safety Data Sheet

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

|                                                 |                     |
|-------------------------------------------------|---------------------|
| Flash point                                     | : Not available     |
| Auto-ignition temperature                       | : Not available     |
| Decomposition temperature                       | : Not available     |
| pH                                              | : 1 – 2             |
| Viscosity, kinematic                            | : Not available     |
| Solubility                                      | : Water: Miscible   |
| Partition coefficient n-octanol/water (Log Kow) | : Not available     |
| Vapour pressure                                 | : 40 mm Hg at 20 °C |
| Vapour pressure at 50°C                         | : Not available     |
| Density                                         | : Not available     |
| Relative density                                | : 1.38 – 1.42       |
| Relative vapour density at 20°C                 | : Not available     |
| Particle characteristics                        | : Not applicable    |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 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

Direct sunlight.

### 10.5. Incompatible materials

metals.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 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        |

#### FERRIC CHLORIDE 40% w/v SOLUTION

|                           |                                          |
|---------------------------|------------------------------------------|
| ATE CLP (oral)            | 1250 mg/kg bodyweight                    |
| Skin corrosion/irritation | : Causes severe skin burns.<br>pH: 1 – 2 |

#### FERRIC CHLORIDE ANHYDROUS (7705-08-0)

|                               |                                                    |
|-------------------------------|----------------------------------------------------|
| pH                            | 2 at 20 °C                                         |
| Serious eye damage/irritation | : Assumed to cause serious eye damage<br>pH: 1 – 2 |

# FERRIC CHLORIDE 40% w/v SOLUTION

## Safety Data Sheet

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

### FERRIC CHLORIDE ANHYDROUS (7705-08-0)

|                                   |                  |
|-----------------------------------|------------------|
| pH                                | 2 at 20 °C       |
| 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 |

### FERRIC CHLORIDE ANHYDROUS (7705-08-0)

|                      |                |
|----------------------|----------------|
| Viscosity, kinematic | Not applicable |
|----------------------|----------------|

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

|                                                           |                                                                                                       |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Ecology - general                                         |                                                                                                       |
| Hazardous to the aquatic environment, short-term (acute)  | : Before neutralisation, the product may represent a danger to aquatic organisms.<br>: Not classified |
| Hazardous to the aquatic environment, long-term (chronic) | : Not classified                                                                                      |

### 12.2. Persistence and degradability

| FERRIC CHLORIDE 40% w/v SOLUTION      |                    |
|---------------------------------------|--------------------|
| Persistence and degradability         | Rapidly degradable |
| FERRIC CHLORIDE ANHYDROUS (7705-08-0) |                    |
| Persistence and degradability         | Rapidly degradable |
| WATER (7732-18-5)                     |                    |
| Persistence and degradability         | Rapidly degradable |

### 12.3. Bioaccumulative potential

| FERRIC CHLORIDE ANHYDROUS (7705-08-0)           |       |
|-------------------------------------------------|-------|
| Partition coefficient n-octanol/water (Log Pow) | 0.055 |

### 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

# FERRIC CHLORIDE 40% w/v SOLUTION

## Safety Data Sheet

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

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

|                                            |                                                                                               |
|--------------------------------------------|-----------------------------------------------------------------------------------------------|
| Regional waste regulation                  | : Disposal must be done according to official regulations.                                    |
| Waste treatment methods                    | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Sewage disposal recommendations            | : Disposal must be done according to official regulations.                                    |
| Product/Packaging disposal recommendations | : Disposal must be done according to official regulations.                                    |
| Additional information                     | : Do not re-use empty containers.                                                             |

### SECTION 14: Transport information

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

#### 14.1. UN number or ID number

|               |           |
|---------------|-----------|
| UN-No. (ADR)  | : UN 2582 |
| UN-No. (IMDG) | : UN 2582 |
| UN-No. (IATA) | : UN 2582 |
| UN-No. (ADN)  | : UN 2582 |
| UN-No. (RID)  | : UN 2582 |

#### 14.2. UN proper shipping name

|                                            |                                                 |
|--------------------------------------------|-------------------------------------------------|
| Proper Shipping Name (ADR)                 | : FERRIC CHLORIDE SOLUTION                      |
| Proper Shipping Name (IMDG)                | : FERRIC CHLORIDE SOLUTION                      |
| Proper Shipping Name (IATA)                | : Ferric chloride solution                      |
| Proper Shipping Name (ADN)                 | : FERRIC CHLORIDE SOLUTION                      |
| Proper Shipping Name (RID)                 | : FERRIC CHLORIDE SOLUTION                      |
| Transport document description (ADR) (ADR) | : UN 2582 FERRIC CHLORIDE SOLUTION, 8, III, (E) |
| Transport document description (IMDG)      | : UN 2582 FERRIC CHLORIDE SOLUTION, 8, III      |
| Transport document description (IATA)      | : UN 2582 Ferric chloride solution, 8, III      |
| Transport document description (ADN)       | : UN 2582 FERRIC CHLORIDE SOLUTION, 8, III      |
| Transport document description (RID)       | : UN 2582 FERRIC CHLORIDE SOLUTION, 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) | : 8 |
| Danger labels (IMDG)              | : 8 |
|                                   | :   |



##### IATA

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



# FERRIC CHLORIDE 40% w/v SOLUTION

## Safety Data Sheet

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

### 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  
 EmS-No. (Fire) : F-A  
 EmS-No. (Spillage) : S-B  
 Other information : No supplementary information available

### 14.6. Special precautions for user

#### Overland transport

Classificationcode (ADR) : C1  
 Limited quantities (ADR) : 5I  
 Excepted quantities (ADR) : E1  
 Packing instructions (ADR) : P001, IBC03, LP01, R001  
 Mixed packing provisions (ADR) : MP19  
 Portable tank and bulk container instructions (ADR) : T4  
 Portable tank and bulk container special provisions (ADR) : TP1  
 Tank code (ADR) : L4BN  
 Tank special provisions (ADR) : TU42  
 Vehicle for tank carriage : AT  
 Transport category (ADR) : 3  
 Special provisions for carriage - Packages (ADR) : V12  
 Hazard identification number (Kemler No.) : 80  
 Orange plates :



Tunnel restriction code (ADR) : E  
 EAC code : 2X

#### Transport by sea

Special provisions (IMDG) : 223  
 Limited quantities (IMDG) : 5 L  
 Excepted quantities (IMDG) : E1  
 Packing instructions (IMDG) : P001, LP01  
 IBC packing instructions (IMDG) : IBC03  
 Tank instructions (IMDG) : T4

# FERRIC CHLORIDE 40% w/v SOLUTION

## Safety Data Sheet

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

|                                    |                                                                      |
|------------------------------------|----------------------------------------------------------------------|
| Tank special provisions (IMDG)     | : TP1                                                                |
| Stowage category (IMDG)            | : A                                                                  |
| Segregation (IMDG)                 | : SGG1, SG36, SG49                                                   |
| Properties and observations (IMDG) | : Colourless to light brown liquid. Highly corrosive to most metals. |

### Air transport

|                                              |            |
|----------------------------------------------|------------|
| PCA Excepted quantities (IATA)               | : E1       |
| PCA Limited quantities (IATA)                | : Y841     |
| PCA limited quantity max net quantity (IATA) | : 1L       |
| PCA packing instructions (IATA)              | : 852      |
| PCA max net quantity (IATA)                  | : 5L       |
| CAO packing instructions (IATA)              | : 856      |
| CAO max net quantity (IATA)                  | : 60L      |
| Special provisions (IATA)                    | : A3, A803 |
| ERG code (IATA)                              | : 8L       |

### Inland waterway transport

|                                                                                                                                         |                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| Classification code (ADN) Limited quantities (ADN) Excepted quantities (ADN) Equipment required (ADN) Number of blue cones/lights (ADN) | : C1<br>: 5 L<br>: E1<br>: PP, EP<br>: 0 |
|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|

### Rail transport

|                                                           |                           |
|-----------------------------------------------------------|---------------------------|
| Classification code (RID)                                 | : C1                      |
| Limited quantities (RID)                                  | : 5L                      |
| Excepted quantities (RID)                                 | : E1                      |
| Packing instructions (RID)                                | : P001, IBC03, LP01, R001 |
| Mixed packing provisions (RID)                            | : MP19                    |
| Portable tank and bulk container instructions (RID)       | : T4                      |
| Portable tank and bulk container special provisions (RID) | : TP1                     |
| Tank codes for RID tanks (RID)                            | : L4BN                    |
| Special provisions for RID tanks (RID)                    | : TU42                    |
| Transport category (RID)                                  | : 3                       |
| Special provisions for carriage – Packages (RID)          | : W12                     |
| Colis express (express parcels) (RID)                     | : CE8                     |
| Hazard identification number (RID)                        | : 80                      |

### 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

#### EU-Regulations

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

| EU restriction list (REACH Annex XVII) |                                  |
|----------------------------------------|----------------------------------|
| Reference code                         | Applicable on                    |
| 3(b)                                   | FERRIC CHLORIDE 40% w/v SOLUTION |

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

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

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

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

# FERRIC CHLORIDE 40% w/v SOLUTION

## Safety Data Sheet

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



### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

### Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

### Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

## National regulations

### Germany

Water hazard class (WGK) : WGK nwg, Non-hazardous to water (Not classified according to Regulation Governing Systems for Handling Substances Hazardous to Waters (AwSV)).

### Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed  
SZW-lijst van mutagene stoffen : None of the components are listed  
SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed  
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed  
SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

### Denmark

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

### Poland

Polish National Regulations : Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).  
Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).  
The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).  
Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).  
Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).  
Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).  
The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488).  
Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).  
Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).  
ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891)

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

# FERRIC CHLORIDE 40% w/v SOLUTION

## Safety Data Sheet

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

### SECTION 16: Other information

#### Abbreviations and acronyms:

|         |                                                                                                 |
|---------|-------------------------------------------------------------------------------------------------|
| ACGIH   | American Conference of Government Industrial Hygienists                                         |
| ADN     | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR     | European Agreement concerning the International Carriage of Dangerous Goods by Road             |
| ATE     | Acute Toxicity Estimate                                                                         |
| BCF     | Bioconcentration factor                                                                         |
| BLV     | Biological limit value                                                                          |
| BOD     | Biochemical oxygen demand (BOD)                                                                 |
| CAS-No. | Chemical Abstract Service number                                                                |
| CLP     | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008                     |
| COD     | Chemical oxygen demand (COD)                                                                    |
| CSA     | Chemical safety assessment                                                                      |
| DMEL    | Derived Minimal Effect level                                                                    |
| DNEL    | Derived-No Effect Level                                                                         |
| EC-No.  | European Community number                                                                       |
| EC50    | Median effective concentration                                                                  |
| ED      | Endocrine disruptor                                                                             |
| EN      | European Standard                                                                               |
| EWC     | European waste catalogue                                                                        |
| IARC    | International Agency for Research on Cancer                                                     |
| IATA    | International Air Transport Association                                                         |
| IMDG    | International Maritime Dangerous Goods                                                          |
| LC50    | Median lethal concentration                                                                     |
| LD50    | Median lethal dose                                                                              |
| LOAEL   | Lowest Observed Adverse Effect Level                                                            |
| Log Kow | Partition coefficient n-octanol/water (Log Kow)                                                 |
| Log Pow | Partition coefficient n-octanol/water (Log Pow)                                                 |
| MAK     | maximum workplace concentration                                                                 |
| NOAEC   | No-Observed Adverse Effect Concentration                                                        |
| NOAEL   | No-Observed Adverse Effect Level                                                                |
| NOEC    | No-Observed Effect Concentration                                                                |
| N.O.S.  | Not Otherwise Specified                                                                         |
| OECD    | Organisation for Economic Co-operation and Development                                          |
| OEL     | Occupational Exposure Limit                                                                     |
| OSHA    | Occupational Safety & Health Administration                                                     |
| PBT     | Persistent Bioaccumulative Toxic                                                                |
| PNEC    | Predicted No-Effect Concentration                                                               |
| PPE     | Personal protection equipment                                                                   |

# FERRIC CHLORIDE 40% w/v SOLUTION

## Safety Data Sheet

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

### Abbreviations and acronyms:

|      |                                                                              |
|------|------------------------------------------------------------------------------|
| RID  | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS  | Safety Data Sheet                                                            |
| STP  | Sewage treatment plant                                                       |
| TF   | Technical function                                                           |
| ThOD | Theoretical oxygen demand (ThOD)                                             |
| TLM  | Median Tolerance Limit                                                       |
| TWA  | Time Weighted Average                                                        |
| VOC  | Volatile Organic Compounds                                                   |
| vPvB | Very Persistent and Very Bioaccumulative                                     |
| UFI  | Unique Formula Identifier                                                    |

### 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 |
| Met. Corr. 1        | Corrosive to metals, Category 1               |
| Skin Irrit. 2       | Skin corrosion/irritation, Category 2         |
| H290                | May be corrosive to metals.                   |
| H302                | Harmful if swallowed.                         |
| H314                | Causes severe skin burns and eye damage.      |
| H315                | Causes skin irritation.                       |
| H318                | Causes serious eye damage.                    |

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.