

# Safety data sheet

## according to Regulation (EC) No 1907/2006, Article 31

Printing date 23.01.2025

Version number 7.04 (replaces version 7.03)

Revision: 17.09.2024

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

#### · 1.1 Product identifier

· Trade name: ferrous fumarate

· Article number: E25

· CAS Number:

141-01-5

· EC number:

205-447-7

· Registration number

For traceability reasons, you will receive info on the REACH registration number upon request. If you have a use subject to registration under REACH, please contact our sales department.

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

No further relevant information available.

· Application of the substance / the mixture

Food additive

Pharma Active ingredients

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Dr. Paul Lohmann GmbH & Co. KGaA

Hauptstraße 2

D-31860 Emmerthal

GERMANY

MSDS@lohmann-minerals.com

· Further information obtainable from: Product safety department

· 1.4 Emergency telephone number:

Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

### SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008

The substance is not classified, according to the CLP regulation.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008 Void

· Hazard pictograms Void

· Signal word Void

· Hazard statements Void

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

### SECTION 3: Composition/information on ingredients

· 3.1 Substances

· CAS No. Description

141-01-5 ferrous fumarate

· Identification number(s)

· EC number: 205-447-7

### SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information: Immediately remove any clothing soiled by the product.

· After inhalation: Supply fresh air; consult doctor in case of complaints.

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- **After skin contact:**  
 Rinse with warm water.  
 If skin irritation continues, consult a doctor.
- **After eye contact:**  
 Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**  
 Rinse out mouth and then drink plenty of water.  
 If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
 No further relevant information available.

### **SECTION 5: Firefighting measures**

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture**  
 In case of fire, the following can be released:  
 Carbon monoxide and carbon dioxide
- **5.3 Advice for firefighters**
- **Protective equipment:**  
 Do not inhale explosion gases or combustion gases.  
 Wear self-contained respiratory protective device.

### **SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
 Avoid formation of dust.  
 Wear protective clothing.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
 Pick up mechanically.  
 Send for recovery or disposal in suitable receptacles.
- **6.4 Reference to other sections**  
 See Section 7 for information on safe handling.  
 See Section 8 for information on personal protection equipment.  
 See Section 13 for disposal information.

### **SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling**  
 Prevent formation of dust.  
 Thorough dedusting.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:**  
 Protect from exposure to the light.  
 Store in cool, dry conditions in well sealed receptacles.
- **7.3 Specific end use(s)** No further relevant information available.

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### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.

- **DNELs**

|            |                |                                            |
|------------|----------------|--------------------------------------------|
| Oral       | DNEL oral      | 0.0833 mg/kg bw/day (human (consumer))     |
| Dermal     | DNEL dermal    | 0.0833 mg/kg bw/day (human (consumer))     |
|            |                | 0.233 mg/kg bw/day (human (worker))        |
| Inhalative | DNEL inhalativ | 0.145 mg/m <sup>3</sup> (human (consumer)) |
|            |                | 0.822 mg/m <sup>3</sup> (human (worker))   |

- **PNECs**

|               |                            |
|---------------|----------------------------|
| PNEC          | 56.3 µg/l (Freshwater)     |
|               | 5.63 µg/l (Marinewater)    |
| PNEC sediment | 0.252 mg/kg (Freshwater)   |
|               | 0.0252 mg/kg (Marinewater) |
| PNEC soil     | 0.0173 mg/kg (Soil)        |

- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**

- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**  
The usual precautionary measures are to be adhered to when handling chemicals.  
Keep away from foodstuffs, beverages and feed.  
Do not eat, drink, smoke or sniff while working.  
Be sure to clean skin thoroughly after work and before breaks.
- **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Hand protection**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye/face protection** Safety glasses
- **Body protection:** Protective work clothing

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Physical state** Solid
- **Colour:** Red-brown
- **Odour:** Nearly odourless

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|                                                                   |                                                         |
|-------------------------------------------------------------------|---------------------------------------------------------|
| · <b>Odour threshold:</b>                                         | Not determined.                                         |
| · <b>Melting point/freezing point:</b>                            | 280 °C                                                  |
| · <b>Boiling point or initial boiling point and boiling range</b> | Undetermined.                                           |
| · <b>Flammability</b>                                             | Dust can combine with air to form an explosive mixture. |
| · <b>Lower and upper explosion limit</b>                          |                                                         |
| · <b>Lower:</b>                                                   | Not determined.                                         |
| · <b>Upper:</b>                                                   | Not determined.                                         |
| · <b>Flash point:</b>                                             | Not applicable.                                         |
| · <b>Auto-ignition temperature:</b>                               | 400 °C (Godbert-Greenwald-Ofen)                         |
| · <b>Decomposition temperature:</b>                               | Not determined.                                         |
| · <b>pH</b>                                                       | Not applicable.                                         |
| · <b>Viscosity:</b>                                               |                                                         |
| · <b>Kinematic viscosity</b>                                      | Not applicable.                                         |
| · <b>Dynamic:</b>                                                 | Not applicable.                                         |
| · <b>Solubility</b>                                               |                                                         |
| · <b>water at 25 °C:</b>                                          | 1.4 g/l                                                 |
| · <b>Partition coefficient n-octanol/water (log value)</b>        | Not determined.                                         |
| · <b>Vapour pressure:</b>                                         | Not applicable.                                         |
| · <b>Density and/or relative density</b>                          |                                                         |
| · <b>Density at 20 °C:</b>                                        | 2.44 g/cm <sup>3</sup>                                  |
| · <b>Relative density</b>                                         | Not determined.                                         |
| · <b>Vapour density</b>                                           | Not applicable.                                         |
| · <b>Particle characteristics</b>                                 | See section 3.                                          |

|                                                                                        |                                               |
|----------------------------------------------------------------------------------------|-----------------------------------------------|
| · <b>9.2 Other information</b>                                                         |                                               |
| · <b>Appearance:</b>                                                                   |                                               |
| · <b>Form:</b>                                                                         | Powder                                        |
| · <b>Important information on protection of health and environment, and on safety.</b> |                                               |
| · <b>Ignition temperature:</b>                                                         | Not determined.                               |
| · <b>Explosive properties:</b>                                                         | Product does not present an explosion hazard. |
| · <b>Change in condition</b>                                                           |                                               |
| · <b>Evaporation rate</b>                                                              | Not applicable.                               |

|                                                                                    |      |
|------------------------------------------------------------------------------------|------|
| · <b>Information with regard to physical hazard classes</b>                        |      |
| · <b>Explosives</b>                                                                | Void |
| · <b>Flammable gases</b>                                                           | Void |
| · <b>Aerosols</b>                                                                  | Void |
| · <b>Oxidising gases</b>                                                           | Void |
| · <b>Gases under pressure</b>                                                      | Void |
| · <b>Flammable liquids</b>                                                         | Void |
| · <b>Flammable solids</b>                                                          | Void |
| · <b>Self-reactive substances and mixtures</b>                                     | Void |
| · <b>Pyrophoric liquids</b>                                                        | Void |
| · <b>Pyrophoric solids</b>                                                         | Void |
| · <b>Self-heating substances and mixtures</b>                                      | Void |
| · <b>Substances and mixtures, which emit flammable gases in contact with water</b> | Void |
| · <b>Oxidising liquids</b>                                                         | Void |
| · <b>Oxidising solids</b>                                                          | Void |
| · <b>Organic peroxides</b>                                                         | Void |
| · <b>Corrosive to metals</b>                                                       | Void |
| · <b>Desensitised explosives</b>                                                   | Void |

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.

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- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions** Risk of dust explosion.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**  
In case of fire, the following can be released:  
Carbon monoxide and carbon dioxide

### SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **Toxicokinetics, metabolism and distribution** Undetermined.
- **Acute effects (acute toxicity, irritation and corrosivity)** Undetermined.
- **Sensitisation** Undetermined.
- **Repeated dose toxicity** Undetermined.
- **11.2 Information on other hazards**
- **Endocrine disrupting properties** The substance is not included.

### SECTION 12: Ecological information

#### · 12.1 Toxicity

##### · **Aquatic toxicity:**

|            |                                                                    |
|------------|--------------------------------------------------------------------|
| EC50, 72 h | 56.4 mg/l (algae) (OECD 201 (Algae, Growth Inhibition Test))       |
|            | 56.3 mg/l (daphnia) (OECD (Daphnia sp. Acute Immobilisation Test)) |

- **12.2 Persistence and degradability** biodegradable
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**  
The product does not contain substances with endocrine disrupting properties in a concentration of more than 0.1 %.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

- |                                                                       |                                                      |
|-----------------------------------------------------------------------|------------------------------------------------------|
| · <b>14.1 UN number or ID number</b>                                  | Void                                                 |
| · <b>ADR, ADN, IMDG, IATA</b>                                         | Void                                                 |
| · <b>14.2 UN proper shipping name</b>                                 | Void                                                 |
| · <b>ADR, ADN, IMDG, IATA</b>                                         | Void                                                 |
| · <b>14.3 Transport hazard class(es)</b>                              |                                                      |
| · <b>ADR, ADN, IMDG, IATA</b>                                         | Void                                                 |
| · <b>Class</b>                                                        | Void                                                 |
| · <b>14.4 Packing group</b>                                           | Void                                                 |
| · <b>ADR, IMDG, IATA</b>                                              | Void                                                 |
| · <b>14.5 Environmental hazards:</b>                                  |                                                      |
| · <b>Marine pollutant:</b>                                            | No                                                   |
| · <b>14.6 Special precautions for user</b>                            | Not applicable.                                      |
| · <b>14.7 Maritime transport in bulk according to IMO instruments</b> | Not applicable.                                      |
| · <b>Transport/Additional information:</b>                            | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>                                       | Void                                                 |

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **TSCA (Toxic Substances Control Act):** ACTIVE
- **TSCA new (21st Century Act)** Substance is not listed.
- **Canadian, Domestic Substances List (DSL)** Substance is listed.
- **Philippines Inventory of Chemicals and Chemical Substances** Substance is listed.
- **Chinese Chemical Inventory of Existing Chemical Substances** Substance is listed.
- **Australian Inventory of Industrial Chemicals** Substance is listed.
- **Korean Existing Chemical Inventory** KE-03969
- **New Zealand Inventory of Chemicals** Substance is listed.
- **HSNO Approval numbers** Substance is not listed.
- **TCSI - Taiwan Chemical Substance Inventory** Substance is listed.
- **Japanese Existing Chemical Substances** 2-1094
- **PFAS** Substance is not listed.
- **Regulation (EU) No 649/2012** Substance is not listed.
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**  
Substance is not listed.
- **REGULATION (EU) 2019/1148**
- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**  
Substance is not listed.

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- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS** Substance is not listed.
- **Regulation (EC) No 273/2004 on drug precursors** Substance is not listed.
- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors** Substance is not listed.
- **EINECS** Substance is listed.
- **REACH - Pre-registered substances** Substance is listed.
- **REACH - Pre-registered substances**
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57** Substance is not listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This safety data sheet contains only safety-relevant information. The information is based on the state of our knowledge at the time of revision, but does not constitute an assurance of product properties, product information or product specifications and does not establish a contractual legal relationship.

This document is only valid in its unchanged form. Dr. Paul Lohmann® accepts no responsibility for the form and content of any changes made by third parties, nor for any resulting damage or claims.

The information is not transferable to other products. Insofar as the product named in this safety data sheet is mixed, blended, processed with or without other materials, the information in this safety data sheet cannot be transferred to the new material produced in this way, unless expressly stated otherwise.

The data sheet does not release the user from the obligation to ensure that he acts in accordance with all regulations in connection with his activity.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

- **Department issuing SDS:** Product safety department
- **Contact:** Dr. Paul Lohmann®
- **Date of previous version:** 03.05.2023
- **Version number of previous version:** 7.03
- **Abbreviations and acronyms:**
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  - ICAO: International Civil Aviation Organisation
  - ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - DNEL: Derived No-Effect Level (REACH)
  - PNEC: Predicted No-Effect Concentration (REACH)
  - PBT: Persistent, Bioaccumulative and Toxic
  - SVHC: Substances of Very High Concern
  - vPvB: very Persistent and very Bioaccumulative
- **\* Data compared to the previous version altered.**

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