

SAFETY DATA SHEET

Safety data sheet according to (EF) no. 1907/2006.

POINT 1: Identification of material/compounds and of the company/factory

1.1. Product identifier:

Triple-Iron

1.2. Relevant identifying use of the material or compound and the usage that is contraindicated:

Iron supplement for pigs.

1.3. Detailed information about the supplier for the safety data sheet:

Jorenku A/S
Teglvaerksvej 11
4733 Tappernoeye
Denmark
Tel.: +45 56214070

Responsible for safety data sheet (e-mail): jorenku@jorenku.dk

1.4. Emergency phone:

Contact the poison centre in your own country.

POINT 2: Identification of danger

2.1. Classification of the material or compound:

CLP (1272/2008): None

2.2. Label elements:

EUH 208: Contains (E)-anethole. May produce an allergic reaction.

EUH 210: Safety data sheet available on request.

2.3. Other dangers:

PBT/vPvB: The ingredients are not PBT/vPvB according to the criteria in REACH annex XIII.

Endocrine disrupting properties: The ingredients are not considered endocrine disruptors according to the criteria of Regulation 2017/2100 or Regulation 2018/605.

POINT 3: Compensation of/information about contents

3.1. Compensation of/information about contents

3.2. Compounds:

Substance name	CAS	EF-No.	Index-no.	REACH reg.no.	Substance Classification	Note
Ferrous sulphate, (1:1) heptahydrate	7782-63-0	231-753-5	026-003-01-4	01-2119513203-57	Acute Tox. 4;H302 Skin Irrit. 2;H315 Eye Irrit. 2;H319	1,2
Magnesium oxide	1309-48-4	215-171-9	-	-	-	1
Iron oxide	1309-37-1	215-168-2	-	-	-	1
(E)-anethole	4180-23-8	224-052-0	-	01-2119979097-22	Skin Sens.1B;H317	-

Substance name	CAS	EF-No.	Index-no.	REACH reg.no.	Substance Classification	Note
Phosphoric acid	7664-38-2	231-633-2	015-011-01-6	01-2119485924-24	Skin Corr. 1B;H314 Eye Dam. 1;H318 Met. Corr. 1;H290 Acute Tox. 4;H302	1,3
Zinc oxide	1314-13-2	215-222-5	030-013-00-7	01-2119463881-32	Aquatic Acute 1;H400 (M=1) Aquatic Chronic 1;H410 (M=1)	1
Manganese oxide	1344-43-0	215-695-8	-	-	-	1
Cobalt carbonate	513-79-1	208-169-4	027-010-00-8	-	Skin Sens. 1;H317 Resp. Sens. 1;H334 Muta. 2;H341 Carc. 1B;H350i Repr. 1B;H360F Aquatic Acute 1;H400 (M=1) Aquatic Chronic 1;H410 (M=10)	1,4

- 1) The substance has a limit value.
- 2) SCL (Specific Concentration limits) for classification: Skin Irrit. 2;H315: $C \geq 25\%$
(Harmonised classification)
- 3) SCL (Specific Concentration limits) for classification: Skin Corr. 1B;H314: $C \geq 25\%$;
Skin Irrit. 2;H315; Eye Irrit. 2;H319: $10\% \leq C < 25\%$ (EU Harmonised).
ATE (oral) = 1250 mg/kg
- 4) SCL (Specific Concentration limits) for classification: Carc. 1B;H350i: $C \geq 0,01\%$

The wording of the hazard statements - see paragraph 16.

POINT 4: First aid measures

4.1. Description of first aid measures:

- Inhalation: Bring the person to fresh air. Blow the nose. Keep calm under supervision. In case of discomfort: Seek medical attention.
- Skin: Remove contaminated clothing. Rinse skin and wash thoroughly with soap and water. In case of discomfort: Seek medical attention.
- Eyes: Thoroughly rinse with water or physiological saline. If possibly, remove contact lenses and open the eye wide. By continued irritation: Seek medical attention.
- Ingestion: Immediately rinse mouth thoroughly and drink water in copious amounts. In case of discomfort: Seek medical attention.

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

Dusty powder can cause sneezing, runny nose and cough. Dust irritates the eyes with redness and watery eyes. Ingestion may cause stomach discomfort such as pain, nausea and vomiting. Can trigger an allergic skin reaction with redness and itchy eczema.

4.3. Indication of whether emergency medical attention and special treatment are needed:

Show this safety data sheet to doctors or casualty ward.

POINT 5: Fire suppression

5.1. Suppression methods:

Not flammable. Against surrounding fire: Water mist (never water jet - spreads the fire), foam, powder or carbon dioxide.

5.2. Special dangers in connection with the material or compound:

Cannot burn.

5.3. Indication for a fire department:

Use compressed air mask by heavy smoke from surrounding fire.

POINT 6: Accidental release measures

6.1. Personal precautions, personal protective equipment, and emergency procedures:

Use personal protective equipment - see point 8. Limit dust formation. Ensure good ventilation.

6.2. Environmental protection indications:

Avoid discharge to drains - see point 12. Inform local environmental authorities in case of spillage to the environment.

6.3. Methods and equipment for containment and cleaning:

Collected and handled as chemical waste. Rinse thoroughly with water. Further waste handling - see point 13.

6.4. References to other points:

See above.

POINT 7: Handling and storage

7.1. Measures for safe handling:

Avoid dust formation and spreading. Ensure effective ventilation. Avoid inhalation of dust and contact with skin and eyes. After use, wash with plenty of water and soap.

7.2. Conditions for safe storage, including any incompatibility:

In well-closed original container, cool and protected from moisture.

7.3. Special usage:

See use - point 1.

PUNKT 8: Exposure control/personal protective equipment

8.1. Control parameter:

AT-limit value (reg. 209 of 13.02.2021):

1 mg/m ³	(Iron salts, dissolvable, calculated as Fe)
6 mg/m ³	(Magnesium oxide, calculated as Mg)
3,5 mg/m ³	(Iron oxide, calculates as Fe)
1 mg/m ³	E (Phosphoric acid)
4 mg/m ³	(Zinc oxide and zinc oxide smoke, calculated as Zn)
0,2 mg/m ³	E (Manganese, powder, dust and inorganic connections, inhalable, calculated as Mn)

0,01 mg/m³

K (Cobalt, powder, dust, smoke and inorganic connections, calculated as Co)

E = The substance has an EU-limit value.

K = The substance is included on the Working Environment Authority's list of substances which are considered to be carcinogenic.

DNEL/PNEC: None set.

8.2. Exposure control:

Appropriate measures for exposure control: Provide effective ventilation.

Personal protective equipment:

Inhalation: By dusty work: Use approved mask (EN149) with particle filter P2. The filters have a limited service life (must be changed). Read the manufacturer's instructions.

Skin: Use protective gloves (EN374) of nitrile rubber. Breakthrough time: 8 hours.

Eyes: Close-fitting safety glasses (EN166) in case of risk of eye contact.

Environmental exposure controls: None specific.

POINT 9: Physical and chemical characteristics

9.1. Information about basic physical and chemical characteristics:

Appearance:	Powder
Colour:	Red
Odor:	Of anise
Melting point/freezing point (°C):	Not decided
Boiling point or bubble-point and boiling point interval (°C):	Not decided
Ignitability (solid, gaseous):	Not decided
Upper/lower explosion limits (vol-%):	Not decided
Flash point (°C):	Not relevant
Auto-ignition temperature (°C):	Not decided
Self-accelerating decomposition temperature (°C):	Not relevant
pH:	6.5
Kinematic viscosity (mm ² /s at 40°C):	Not decided
Solubility (mg/l):	Soluble in water
Partition coefficient n-octanol/water Log K _{ow} :	Not relevant – solution (see point 12)
Vapor pressure (hPa, 20°C):	Not decided
Density and/or relative density (g/cm ³):	> 1
Relative vapor density (air=1):	Not decided
Particulate properties:	No information
9.2. Other information:	None relevant.

POINT 10: Stability and reactivity

10.1. Reactivity:

No known.

10.2. Chemical stability:

Stable under recommended storage conditions - see point 7.

10.3. Risk of dangerous reactions:

No known.

10.4. Conditions that should be avoided:

Avoid all heating (toxic chlorine gas is formed when heated).

10.5. Materials that should be avoided:

Oxidants, acids and bases.

10.6. Dangerous decomposition products:

None known.

POINT 11: Toxicological information

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

Acute toxicity: Based on available data, the classification criteria are not met.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitization: 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.

Reproduction toxicity: Based on available data, the classification criteria are not met.

Single STOT-exposure: Based on available data, the classification criteria are not met.

Repeated STOT-exposures: Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Danger class	Data	Test	Data source
Acute toxicity:			
Inhalation	LC ₅₀ (rat) = 1 mg/m ³ /4h (Iron sulphate)	Not informed	ECHA
Dermal	LC ₅₀ (rat) > 2000 mg/kg (Iron sulphate)	OECD 402	ECHA
Oral	LD ₅₀ (mouse) = 1300 mg/kg (Iron sulphate)	Not informed	ECHA
	LD ₅₀ (rat) > 5000 mg/kg (Iron oxide)	Not informed	ECHA
Corrosivity/irritation:	Skin irritation, rabbit (Iron sulphate)	OECD 404	ECHA
	Eye irritation, rabbit (Iron sulphate)	OECD 405	ECHA
Sensitisation:	Skin sensitiser, guinea pig ((E)-anethole)	OECD 406	ECHA
CMR:	No data available.	-	-

Usual exposure methods: Lungs, skin and gastrointestinal tract.

Inhalation: Dust can have an irritating effect on the mucous membranes of the respiratory tract with throat ache and cough and shortness of breath. Inhalation of large quantities can cause metal fume fever with nosebleeds, chest pain and influenza-like symptoms.

Skin: May be mild irritating.

Eyes: May be irritating with redness and sting.

Ingestion: May be irritating to the mucous membranes in the mouth and throat and cause nausea, vomiting, constipation, gastric ulcer, palpitations and, in severe cases, unconsciousness may occur. Damage to the liver and kidneys may occur.

Chronic

effects: Inhalation of large amounts over a long period of time can cause pneumoconiosis (deposition of dust particles in the tissue of the lung), which can lead to reduced lung capacity. Symptoms are shortness of breath on exertion. Cobalt compounds are carcinogenic. Can trigger allergic skin reaction to anise oil ((E)-anethole) and benzoic acid with redness and itchy eczema.

11.2. Information about other hazards: None known.

POINT 12: Environmental information

12.1. Toxicity:

Aquatic	Data	Test (Media)	Data source
Fish	LC ₅₀ (Idus dorata, 96h) > 1000 mg/l (Iron oxide)	Not informed	ECHA
Crustacean	LC ₅₀ (Daphnia magna, 48h) = 7.1 mg/l (Iron sulphate)	Not informed	IUCLID
Alga	No data available.	-	-

12.2. Persistence and degradability:

Calcium carbonate and iron oxide are inorganic substances. Methods for determining the biodegradability do not apply to inorganic substances.

12.3. Bioaccumulative potential:

No available/ applicable data.

12.4. Mobility in soil:

No available/ applicable data.

12.5. Results of PBT and vPvB assessment:

The ingredients are not PBT/vPvB according to the criteria in REACH annex XIII.

12.6. Endocrine-disrupting capacities:

None known.

12.7. Other adverse effects:

None known.

POINT 13: Removal

13.1. Methods for waste handling:

Use the local authority's collection scheme.

Chemical waste group: **EAK-code:**

H 02 01 06

POINT 14: Transport information

Not covered by the transport regulations (ADR/RID/IMDG/IATA).

14.1. UN-number or ID-number: None.

14.2. UN-shipment designation (UN proper shipping name): None.

14.3. Transport danger class(es): None.

14.4. Packaging group: None.

14.5. Environmental dangers: None.

14.6. Special regulations for the user: None.

14.7. Bulk transport by sea according to IMO instruments: Not relevant.

POINT 15: Information about regulations

15.1. Special determinations/special rules for the material or compound with respect to safety, health and environment:

None.

15.2. Chemical safety evaluation:

No CSR.

POINT 16: Other information

Hazard statements given under point 3:

H290: May be corrosive to metals.

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H341: Suspected of causing genetic defects.

H350i: May cause cancer by inhalation.

H360F: May damage fertility.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Abbreviations:

AT = Working environment authority

CMR = carcinogenic, mutagenic, or toxic to reproduction

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

LC₅₀ = Lethal Concentration 50 %

LD₅₀ = Lethal dosage 50 %

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

FW = Fresh Water

vPvB = very Persistent, very Bioaccumulative

Literature:

ECHA = REACH Registration dossier from the ECHA website.

IUCLID = International Uniform Chemical Database Information

Advice on training / instruction:

The product may only be used by persons who are carefully instructed in the execution of the work and who have knowledge of the contents of this safety data sheet.

Changes since previous version:

3, 8, 11, 12 & 16

Made by: Jorenku A/S - Teglvaerksvej 11 - DK-4733 Tappernoeye - Tel. +45 56 21 40 70 / MO

Translated by: Jorenku A/S - Teglvaerksvej 11 - DK-4733 Tappernoeye - Tel. +45 56 21 40 70 / LVB