



MATERIAL SAFETY DATA SHEET

following European Regulation (CE) REACH N°1907/2006 and Regulation (CE) N°453/2010

FERROSTRENE® Premium

Date of issue: 13 July 2011
Date of revision: 8 September 2017

Version N° : 2
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1. SECTION 1 : Identification of the substance or mixture and the company

1.1.- Identification of the product

Commercial name of the product:

Ferrostrene® Premium

Chemical Name of the substance:

Acetic acid, oxo-, sodium salt, reaction products with ethylenediamine and phenol, Iron sodium salts.

EC N°:

283-044-5

CAS N° :

84539-55-9

REACH Registration N° :

01-2119487279-21-0002

1.2. Identified uses of the substance or mixture and unadvisable uses

As fertiliser in agriculture.

1.3. SDS Supplier Data

Laboratorio JAER , S.A.

C/ Barcelona, 411

08620 – Sant Vicenç dels Horts

Barcelona (Spain)

Phone: +34 93 656 07 52 Fax: +34 93 656 09 90

e-mail: pere.tarrida@jaer.es

1.4. Emergency phone

Emergency phone at Laboratorio JAER, S.A. : +34 93 656 07 52



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2. SECTION 2 : Danger Identification

2.1. Classification of the substance or mixture

Classification:

The product is not dangerous according to European Directive 67/548/CEE and according to the Regulation (EC) No. 1272/2008.

Effects to the environment: Not dangerous.

2.2. Label elements

Danger pictogram:

Not applicable

Advising wording:

Not applicable

Danger indication:

Not applicable

Caution advise:

P102 + P270

2.3. Other dangers:

No data available.

3. SECTION 3 : Composition / information about the components

3.1 Substance / Preparation :

UVCB Substance

3.2 Chemical name:

Acetic acid, oxo-, sodium salt, reaction products with ethylenediamine and phenol, Iron sodium salts

3.3 CAS N°:

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3.4 EC N° :
283-044-5

3.5 DSD Classification:
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3.6 CLP Classification:
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4. SECTION 4 : First Aid

4.1. First aid description:

In case of inhalation:

Take the person away from the contaminated zone, carrying him / her to an aired zone.
Get medical attention.

In case of skin contact:

Wash immediately with soap and rinse with plenty of water.

In case of eyes contact:

Wash immediately with plenty of water, also below eyelids, during at least 15 minutes.
Get medical assistance immediately.

In case of ingestion:

Wash the mouth immediately with water and drink a lot.

4.2. Main symptoms and effects, acute and later.

Inhalation:

Adverse effects are not foreseen.

Skin contact:

Adverse effects are not foreseen.

Eyes contact:

Adverse effects are not foreseen.

Ingestion:

Adverse effects are not foreseen.

4.3. Indication of any medical attention and special treatments to be applied immediately

If any symptom is persisting, ask the doctor.



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5. SECTION 5 : Measures of fight againts fire

5.1. Extintion means

Right extintion means:

Use suitable extintion means as : water, dry powder, carbon dioxide, foam.

Extintion means to avoid :

None

5.2. Specific danger derived from the substance or mixture

The product doesn't let off toxic gases and is not flammable.

5.3. Protection gear for the staff of fight against fire :

It doesn't need special equipment.

6. SECTION 6 : Measures to take in case of accidental dumping

6.1. Individual precautions, protection equipment and emergency procedures

Avoid contacty with eye and skin.

Avoid dust breathe.

Use individual protection equipment.

Ensure an adequate ventilation.

See also Section 8.

6.2. Environment precautions

Avoid that the product reach the surface water or the sewer net.

6.3. Clean and holding material and methods

Collect the product by mechanical means and store in appropriate containers for its elimination. Label the containers and proceed regarding the local authorities rules.

Clean the rest with some water. Avoid the contamination of the natural water sources.

6.4. Reference to other sections

Consult Section 8 relative to suitable protection equipments.

Consult Section 13 relative to the treatment of residues.



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7. SECTION 7 : Handling and storage

7.1. Precautions for a safety use

See also Section 8.

General advise: Apply the current GP (Good Practices) concerning industrial hygiene and safety.

Avoid contact with eyes, skin and clothes.

Avoid dust formation.

Keep the product in its original packing.

7.2. Safety storage conditions, including possible incompatibilities.

Store far from the materials listed in Section 10.

Keep the packing closed in a dry, fresh and well ventilated place.

Keep away of non authorized persons.

Keep away of food, drinks and animal feed.

7.3. Final specific use

Agriculture: Fertiliser.

8. SECTION 8 : Exposure control / Personal protection

8.1. Control parameters

DNELs:

DNEL for workers:

0,8 mg/kg of body weight / day (skin exposition)

1,8 mg/m³ (inhalation)

DNEL for population in general:

0,417 mg/kg of body weight / day (skin exposition)

0,435 mg/m³ (inhalation)

0,125 mg/kg of body weight / day (oral exposition)



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Predicted non effect concentration (PNEC):

<i>PNEC water (water):</i>	2,40 mg/L
<i>PNEC water (sea water):</i>	0,24 mg/L
<i>PNEC water (intermitent emissions):</i>	1,20 mg/L
<i>PNEC sediment (water):</i>	1,90 mg/kg
<i>PNEC sediment (sea water):</i>	0,19 mg/kg
<i>PNEC soil:</i>	1,60 mg/kg
<i>PNEC residual water treatment plant:</i>	45,00 mg/L.
<i>PNEC oral:</i>	1,1 mg/kg of food

8.2. Exposure controls

8.2.1. Suitable technical controls

See also Section 7.

Ensure of an adequate ventilation.

Use only in area with adequate extraction and ventilation.

8.2.2. Individual protection measures

Respiratory protection: In case on insufficient ventilation, use adequate respiratory (breathing) equipments. Respirator with filter type A.

Hands protection: Protective gloves fulfilling norm EN 374. Rubber gloves.

Eyes protection: Protectives glasses with lateral closing as described in norm EN 166.

Body and skin protection: While handling the product, use adequate protection clothes

Hygiene measures: Handle the product according to the GP of industrial hygiene and safety. Clean hands before to stop and immediatley after to handle the product. Do not eat, drink or smoke when handling the product.

8.2.3. Environmental Exposure Controls

Avoid the product to reach the surface water or the sewer network.



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9. SECTION 9 : Physiscal and chemical properties

Aspect	microgranulated powder, free of refined
Colour	black – reddish
Odour	little intense, characteristic
pH (1%)	7.5 - 9.5
Melting point :	It decomposes without melting, at a temperature higher than 200 ° C
Boiling point:	It decomposes before melting.
Inflammation point:	n.a.
Self ignition temperature:	331°C a 1013.25 hPa
Inflammability	It is not inflammable.
Explosive properties:	It is not explosive
Oxidizing properties:	It is not oxidant
Vapour pressure:	< 1E-6hPa a 25°C
Viscosity:	n.a.
Apparent density	450 – 650 Kg/m3
Solubility in water	Theoretical 120 g/l ; Practical (CoA) 60 g/l
n-octanol/water partition coeficient (log Pow):	< -4,2 a 23°C



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10. SECTION 10 : Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is fully stable at usual environmental conditions and at usual temperature and pressure conditions foreseen when store or manipulate.

10.3. Dangerous reactions possibility

None under usual conditions of use.

10.4. Conditions to avoid:

Keep away from flame, hot surfaces and ignition sources.

10.5. Incompatibility materials

Avoid oxidizing agents

10.6. Dangerous products of decomposition

By pirolisis toxic fumes as carbon oxydes (CO, CO₂) and nitrogen oxydes (NO_x) can be produced.

11. SECTION 11 : Toxicological Information

11.1. Toxicological effects information

Acute Toxicity: The product do not show any acute toxic effect:

DL50 (oral, rat): > 2000 mg/kg of body weight (according to OECD 401 Guideline)

CL50 (inhalation, rat): > 4200 mg/m³ air (according to OECD 403 Guideline)

DL50 (dermal, rat): > 2000 mg/kg of body weight (según Guía OECD 402 Guideline)

Skin corrosion/irritation:

Not irritant (tested on rabbit according to OECD 404 Guideline).



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Severe ocular lesions / irritation:

Not irritant (tested on rabbit according OECD 405 Guideline).

Skin sensitization:

No sensitizer (Local Lymph Node Assay (LLNA) tested on rat according to OECD 429 Guideline).

Chronic Toxicity:

Nor carcinogenic, nor mutagenic, nor teratogenic effect has been detected in animal tests.

12. SECTION 12 : Ecological information

12.1.Toxicity

Aquatic Toxicity:

- The product is not toxic for fish (tested according OECD 203 Guideline and the method EU C.1):

CL50 > 120 mg/L

NOEC ≥ 120 mg/L

- The product is not toxic for aquatic invertebrates (tested according to OECD 202 Guideline and the method EU C.2):

CL50 > 120 mg/L

- The product is not toxic for aquatic algae (tested according OECD 201 Guideline and the method EU C.3):

CL50 > 294 mg/L

NOEC 8.2 mg/L



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- The product is not toxic for aquatic microorganisms (tested according OECD 209 Guideline and the method EU C.11):

CL50 > 1000 mg/L
NOEC 450 mg/L

Toxicity on sediments:

No data available.

Terrestrial Toxicity:

- The product is not toxic for birds:

CL50 > 6000 mg/kg de peso corporal

12.2. Persistency and degradability

The product is biodegradable

12.3. Bioaccumulation potential

The product is not bioaccumulable (Log Pow < -4,2).

12.4. Mobility on soil

No data available.

12.5. PBT y vPvB results evaluation

The product is not persistent, nor bioaccumulable, nor toxic (PBT).

12.6. Other adverse effects

No data available.

13. SECTION 13 : Considerations related to elimination

Destroy the product according to the local regulations.



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14. SECTION 14 : Transport information

Road and Railway - RID/ADR

Not classified

Sea freight – IMDG Code

Not classified

Aerial Transport - ICAO/IATA

Not classified

15. SECTION 15 : Regulatory information

15.1. Regulation and legislation in the field of safety, health and environment, specific for the substance or mixture

Clasificación:

The product is not dangerous according to European Directive 67/548/CEE, and according to European Regulation (EC) No. 1272/2008.

Regulations:

- Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances.
- Directive 1999/45/CE concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations.
- Directive 91/689/CEE concerning hazardous waste.
- Regulation (EC) No. 1907/2006, concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH),
- Regulation (EC) No. 1272/2008, on classification, labelling and packaging of substances and mixtures
- Regulation (EU) No. 453/2010, amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)



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15.2. Safety chemical evaluation

The safety chemical evaluation for this product has been performed.

16. SECTION 16 : Other informations

Revisión de esta ficha de datos de seguridad:

Revision: 2
Last revision date: September 8th 2017

Abbreviations and acronyms:

DNEL: Derived No Effect Level
PNEC: (Predicted No Effect Concentration)
CL50: Average Letal Concentration
DL50: Average Letal Dose
NOEC: Non Observerd Effect Concentration

Bibliography and data sources:

European Commission - Health and Consumer Affairs
<http://ecb.jrc.ec.europa.eu/>
Safety chemical dossier – Laboratorio JAER, S.A.-.

H/P = R/S phrases list, danger warnings, safety indications, and caution advice:

Phrase P: P102: Keep away of children reach
P270: Do not eat, drink and smoke while using the product

The content and format of this safety data sheet are in line with the Directives of the European Commision 1999/45/EC, 67/548/EC, 1272/2008/EC and with the European Commision Regulation 1907/2006/CE (REACH) and later modifications.



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Advice to reader :

The information in this Safety Data Sheet corresponds to the current situation of our knowledge but we do not assume an responsibility for it.

The users should consider this information only as a complement to other information obtained by themselves, and should carry out independent tests regarding the suitability and completeness of the information of all the sources, in order to ensure the proper use and the elimination of these materials, as well as the safety and health of employees, customers and environment protection.