

ACTIFERRUM

Safety data sheet

According to Annex II of REACH – Regulation No. 2015/830

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product ID: 0027206/19
Trade name: ACTIFERRUM

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

Description/Use: NP organic fertilizer - Mixture of NP organic fertilizers (S 5) with iron (Fe) (Legislative Decree 75/2010)

Identified uses	Industrial	Professional	Consumption
FOR USE IN AGRICULTURE	-	✓	-

1.3. Details of the supplier of the safety data sheet

Company name: FERTILEVA S.r.l.
Address: Strada comunale 14 Madonna delle Grazie Caione
Place and State: 74014 LATERZA TA Italy
tel. +39 - 099 6411772
fax +39 - 099 9915131

e-mail of the competent person,
competent person responsible for the safety data sheet: info@fertileva.it

1.4. Emergency telephone number

Emergency information service:
Poison Centre - University of Torino - Tel. 011/637637
Poison Centre - University of Rome, Policlinico Umberto I - Tel. 06/490663
Poison Centre - Osp. Maggiore - Unità operativa di Tossicologia - Bologna - Tel. 051/382984235
Poison Centre - Ospedali Riuniti Cardarelli (c/o Usl 40) - Naples - Tel. 081/5453333
Poison Centre - Ospedale di Niguarda - Milano - Tel. 02/66101029

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

This product is classified as dangerous under Regulation (EC) 1272/2008 (CLP) (as amended). Therefore, the product requires a safety data sheet compliant with provisions of the Regulation (EU) 2015/830. Any additional information regarding health and/or environment risks is given under sections 11 and 12 of this sheet.

Hazards classification and identification:
Skin irritation, category 2 H319 May cause serious eye irritation.

2.2. Label elements

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Danger labelling according to Regulation (EC) 1272/2008 (CLP) as amended.

Pictogram: --



Signal word: Warning

Hazard statement:

H319 May cause serious eye irritation.

Precautionary statement:

P280 Wear eye and face protection. --
P337+P313 If the irritation persists, call a doctor.

2.3. Other hazards

Based on available data, the product does not contain PBT or vPvB substances in percentage greater than 0.1%.

SECTION 3. Composition/information on ingredients

3.1. Substances

No relevant data.

3.2. Mixtures

It contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
FARINA DI CARNE ED OSSA		
CAS	$78 \leq x < 82$	
CE		
INDEX -		
IRON (III) SULFATE HEPTAHYDRATE		
CAS 7782-63-0	$19,5 \leq x < 21$	Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Irrit. 2 H315
CE 026-003-01-4		
INDEX 016-094-00-1		
Nr. Reg. 01-2119487295-27-XXXX		

The full text of the hazard statement (H) is given in section 16 of the sheet.



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SECTION 4. First aid measures

4.1. Description of first aid measures

IF IN EYES: Remove eventual contact lenses. Flush eyes immediately and thoroughly with running water for at least 15 minutes, lift eyelids to facilitate irrigation. Seek medical attention if the problem persists.

IF ON SKIN: Remove contaminated clothing. Wash immediately and thoroughly with water. Seek medical attention if the problem persists. Wash the contaminated clothing before reusing it.

IF INHALED: Move person to fresh air. If breathing is difficult, call immediately a doctor.

IF SWALLOWED: Call a doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a doctor. Do not administer anything by mouth if the subject is unconscious and if not authorized by the doctor.

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

No specific information on symptoms and effects caused by the product is known.

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

No information available.

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING MEDIA

The extinguishing media are the traditional ones: carbon dioxide, foam, dry extinguishing powder and water spray.

UNSUITABLE EXTINGUISHING MEDIA

No one in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDOUS COMBUSTION PRODUCTS

Avoid inhaling combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Cool the containers with water jets to prevent product decomposition and development of substances potentially hazardous to health. Always wear full fire protection equipment. Collect the extinguishing water which must not be discharged into the sewers. Dispose of the contaminated water used for extinguishing and the residue of the fire according to regulations in force.

EQUIPMENT

Traditional protective clothing for firefighting, such as open-circuit self-contained breathing apparatus (EN 137), fire retardant suit (EN 469), fire retardant gloves (EN 659) and fire brigade boots (HO A29 or A30).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid formation of dust by spraying the product with water if there are no contraindications.

Wear appropriate protective equipment (including personal protective equipment as described under section 8 of the safety sheet) in order to prevent skin, eye irritation and personal protective clothing damage. These indications are valid both for workers in charge of processing and for emergency interventions.

6.2. Environmental precautions



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Avoid runoff and contact with soil, waterways, drains and sewers.

6.3. Methods and material for containment and cleaning up

Collect the spilled product and place it in containers for recovery or disposal. If the product is flammable, use explosion-proof equipment. Eliminate the residue with jets of water if there are no contraindications.

Provide enough ventilation of the place affected by the leak. Evaluate the compatibility of the container to be used with the product, by checking the section 10. The disposal of contaminated material must be carried out in accordance with the provisions under section 13.

6.4. Reference to other sections

Any information regarding personal protection and disposal is given under sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Handle the product after checking all the other sections of this safety data sheet. Avoid the dispersion of the product in the environment. Do not eat, drink or smoke during use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

Keep the product in clearly labelled containers. Store closed containers in well-ventilated place, away from direct sunlight. Keep the containers away from any incompatible materials, after checking the section 10.

7.3. Specific end uses

No data available.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Normative requirements:

TLV-ACGIH

ACGIH 2018

IRON (III) SULFATE HEPTAHYDRATE

Threshold limit value

Type	State	TWA/8h	STEL/15min		
		mg/m ³	ppm	mg/m ³	ppm
TLV-ACGIH		1			

Legend:

(C) = CEILING ; INALAB = Inhalable Fraction; RESPIR = Respirable Fraction; TORAC = Thoracic Fraction

8.2. Exposure controls

Given that the use of appropriate technical measures should always take priority over personal protection equipment, ensure good ventilation in the workplace through effective local aspiration.

When selecting personal protective equipment, if necessary, request advice from your chemical substance suppliers.

Personal protective equipment needs to bear CE marking showing its conformity with the relevant directives.

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Provide emergency shower with visoculare pan.

HAND PROTECTION

In case of prolonged contact with the product, protect your hands with chemical resistant gloves (ref. standard EN 374).

For the final choice of the glove's material, it is also necessary to evaluate the process of use of the product and any other resulting products. Please note also that latex gloves can cause sensitization phenomena.

SKIN PROTECTION

Wear category I professional long-sleeved work clothes and safety footwear (ref. Directive 89/686 / EEC and standard EN ISO 20344). Wash with soap and water after removing protective clothing.

EYE PROTECTION

Wear hooded visor or protective visor combined with airtight goggles (ref. standard EN 166).

RESPIRATORY PROTECTION

Unnecessary, unless otherwise indicated in the chemical risk assessment.

ENVIRONMENTAL EXPOSURE CONTROLS

Manufacturing processes emissions, including those from ventilation equipment, should be controlled for compliance with environmental protection legislation.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	solid, pelleted
Colour	brown
Odour	characteristic
Odour threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point	No data available
Boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Lower flammability limit	No data available
Upper flammability limit	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Solubility	No data available
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

9.2. Other information

There is no additional information.

SECTION 10. Stability and reactivity

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10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions

Under normal conditions of use and storage no dangerous reactions are foreseeable.

10.4. Conditions to avoid

There are no specific conditions known which must be avoided. However, follow the usual chemical safety precautions.

10.5. Incompatible materials

There is no additional information.

10.6. Hazardous decomposition products

There is no additional information.

SECTION 11. Toxicological information

In the absence of experimental toxicological data on the product itself, eventual product health hazards are being evaluated based on the properties of the substances contained, according to the criteria provided by the reference classification standard.

Consider, therefore, the concentration of the individual hazardous substances that may be mentioned under section 3, to evaluate the toxicological effects deriving from exposure to the product.

11.1. Information on toxicological effects

Metabolism, kinetics, mode of action and other information

There is no additional information

Information on likely routes of exposure

There is no additional information

Delayed and immediate effects and chronic effects from short and long-term exposure

There is no additional information

Interactive effects

There is no additional information

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:

Not classified (no relevant component)

LD50 (Oral) of the mixture:

Not classified (no relevant component)



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LD50 (Cutaneous) of the mixture:
Not classified (no relevant component)

FERRO(II) SOLFATO EPTAIDRATO

LD50 (Oral) 1520 mg/kg Mouse

SKIN CORROSION/IRRITATION

It does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE/EYE IRRITATION

It does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

It does not meet the classification criteria for this hazard class

GERM CELL MUTAGENIC

It does not meet the classification criteria for this hazard class

CARCINOGENICITY

It does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICANT

It does not meet the classification criteria for this hazard class

SPECIFIC TARGET ORGAN TOXICITY (STOT) – SINGLE EXPOSURE

It does not meet the classification criteria for this hazard class

SPECIFIC TARGET ORGAN TOXICITY (STOT) – REPEATED EXPOSURE

It does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

It does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

Use applying good practices, avoid dispersal of the product in the environment. Notify the competent authorities if the product has reached watercourses or if it has contaminated the soil or vegetation.

12.1. Toxicity

No data available

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12.2. Process of degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain PBT or vPvB substances in percentage greater than 0.1%.

12.6. Other adverse effects

No data available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Recycle if possible. Product residues as such are to be considered non-hazardous special waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be entrusted to an authorized waste management company, in compliance with national and possibly local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be sent for recovery or disposal in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not considered dangerous pursuant to the provisions in force on road (A.D.R.), rail (RID), sea (IMDG Code) and air (IATA) transport of dangerous goods.

14.1. UN number

Not relevant

14.2. UN proper shipping name

Not relevant

14.3. Transport hazard classes

Not relevant

14.4. Packing group

Not relevant

14.5. Environmental hazards

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Not relevant

14.6. Special precautions for user

Not relevant

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18 / EC: None

Restrictions regarding contained product or substances according to Annex XVII Regulation (EC) 1907/2006

None

Substances in Candidate List (Art. 59 REACH)

Based on available data, the product does not contain SVHC substances in percentage greater than 0.1%.

List of substances subject to authorisation (REACH, Annex XIV)

None

Substances subject to export notification obligation according to Reg. (EC) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Sanitary checks

Workers exposed to this health dangerous chemical agent have to be under health surveillance in accordance with the provisions of art. 41 of Legislative Decree 81 of 9 April 2008 unless the risk to the safety and health of the worker has been assessed as irrelevant, in accordance with the provisions of art. 224 paragraph 2.

15.2. Chemical Safety Assessment

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Chemical safety assessment for substances in this mixture hasn't been carried out.

SECTION 16. Other information

Text of hazard (H) indications mentioned in sections 2-3 of the sheet:

Acute Tox. 4	Acute toxicity, category 4
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
H302	Harmful if swallowed.
H319	May cause serious eye irritation.
H315	May cause skin irritation.

LEGEND:

- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- CAS NUMBER: Number of the Chemical Abstract Service
- EC50: Concentration producing the desired effect in 50% of the tested population
- CE NUMBER: Identification number ESIS (The European Chemical Substances Information System)
- CLP: Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures
- DNEL: Derived No-Effect Level
- EmS: Emergency Schedule
- GHS: "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
- IATA DGR: Dangerous Goods Regulations (DGR) for the air transport (IATA)
- IC50: Concentration of an inhibitor producing the desired effect in 50% of the tested population
- IMDG: International Maritime Dangerous Goods Code
- IMO: International Maritime Organization
- INDEX NUMBER: Identification number in the Annex VI of the CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, Bioaccumulative and Toxic according to REACH
- PEC: Predictable Environmental Concentration
- PEL: Permissible Exposure Limit
- PNEC: Predicted No Effect Concentration
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals CE 1907/2006
- RID: Regulation concerning the International Carriage of Dangerous Goods by rail
- TLV: Threshold Limit Value
- TLV CEILING: Concentration in air that should not be exceeded during any part of the working exposure.
- TWA STEL: Short-term Exposure Limit
- TWA: Time-weighted Average Limit
- VOC: Volatile Organic Compounds
- vPvB: Very persistent and very bioaccumulative according to REACH
- WGK: Water Endangerment Class (Germany).

KEY LITERATURE REFERENCES:

1. Regulation (EC) No. 1907/2006 of the European Parliament (REACH)
2. Regulation (EC) No. 1272/2008 of the European Parliament (CLP)
3. Regulation (EU) No. 790/2009 of the European Parliament (I Atp. CLP)
4. Regulation (EU) No. 2015/830 of the European Parliament
5. Regulation (EU) No. 286/2011 of the European Parliament (II Atp. CLP)
6. Regulation (EU) No. 618/2012 of the European Parliament (III Atp. CLP)
7. Regulation (EU) No. 487/2013 of the European Parliament (IV Atp. CLP)
8. Regulation (EU) No. 944/2013 of the European Parliament (V Atp. CLP)
9. Regulation (EU) No. 605/2014 of the European Parliament (VI Atp. CLP)
10. Regulation (EU) No. 2015/1221 of the European Parliament (VII Atp. CLP)
11. Regulation (EU) No. 2016/918 of the European Parliament (VIII Atp. CLP)
12. Regulation (EU) No. 2016/1179 (IX Atp. CLP)



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13. Regulation (EU) No. 2017/776 (X Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- Website IFA GESTIS
- Website Agency ECHA
- Chemical Safety's SDS database – Ministry of Health and National Institute of Health

Disclaimer:

The information in this document is based on the present state of our knowledge. The user must ensure the suitability and completeness of the information in relation to the specific use of the product. This document does not represent any guarantee of the properties of the product. Since the use of the product does not fall under our direct control, it is the user's obligation to observe the laws and regulations in force regarding hygiene and safety under his own responsibility. No responsibility is assumed for improper use. It is necessary to provide adequate training for the employees who use chemical substances.