

**Bio-Chel Fe Granular**

**Section 1: Identification of the substance/preparation and of the company/undertaking**

**1.1 Product identifier**

Product Name: **Bio-Chel Fe Granular**  
Supplier: Engage Agro Europe Ltd  
Chorley Business & Technology Centre  
Euxton Lane,  
Euxton, Chorley  
Lancashire PR7 6TE  
England  
Telephone: +44 (0) 1257 226590



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

Product use: Fertiliser. For professional use only.  
Uses advised against: All uses not specified in this section or in section 7.3.

**1.3 Emergency telephone**

Emergency Telephone	Type of Assistance	Opening Hours
0845 4647	England and Wales: NHS Direct – Health advice and assistance	24 Hours
08454 242424	Scotland: NHS24	24 Hours

**Section 2: Hazards identification**

**2.1 Classification of the Substance and Mixture**

CLP Regulation (EC) n°1272/2008: Classification of this product has been carried out in accordance with CLP Regulation (EC) N° 1272/2008.  
Skin Sens. 1B: H317

**2.2 Label elements**

Hazard Statements: Skin Sens. 1B: H317 - May cause an allergic skin reaction

Hazard Pictograms:



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<b>Signal Words:</b>	Warning
<b>Precautionary Statement:</b>	H317 - May cause an allergic skin reaction.
<b>Prevention</b>	
<b>Precautionary Statement:</b>	P280 - Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	P361 - Remove/take off immediately all contaminated clothing. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P333+P313 - If skin irritation or rash occurs: get medical advice/attention.
<b>Precautionary Statement:</b>	
<b>Storage</b>	
<b>Precautionary Statement:</b>	P501 - Dispose of contents/container according to local regulations.
<b>Disposal</b>	

**2.3 Other Hazards**

<b>Other Hazards</b>	PBT not identified as a PBT substance
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**Section 3: Composition/information on ingredients**

**3.1 Substances**

<b>Trade Name:</b>	Bio-Chel Fe Granular
<b>CAS No:</b>	666828-40-6
<b>EC No:</b>	476-670-7
<b>REACH No:</b>	01-0000019926-57-0000
<b>Index No:</b>	Not applicable
<b>IUPAC name:</b>	Iron nitrate, tetra sodium salt of 1, 2 dicarboxyethyl D, L aspartic acid
<b>Molecular formula:</b>	FeC <sub>8</sub> H <sub>7</sub> NO <sub>8</sub> Na

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**Section 4: First aid measures**

**4.1 Description of first aid measures**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention.  
General advice: The first step is to remove the injured person from a contaminated environment.

- By inhalation:** Unlikely route of exposure due to the form of the product - a non-dusty microgranule. Move to fresh air. If needed, seek medical attention.
- By skin contact:** Rinse off with plenty of water. Remove contaminated clothing. If symptoms persist, seek medical attention.
- By eye contact:** Rinse thoroughly with plenty of cold water. Seek medical attention.
- By Ingestion:** Rinse mouth, give 2-3 glasses of water to drink. Seek medical attention. Induce vomiting. Never give anything by mouth to an unconscious person.

**4.2 Most Important symptoms and effects, both acute and delayed:**

The most important known symptoms and effects are described in Section 2.

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

TREAT SYMPTOMATICALLY. If you feel unwell, seek medical advice. Show the label where possible. Show this safety data sheet to the doctor in attendance.

**Section 5: Fire-fighting measures**

**5.1 Extinguishing media**

- Extinguishing media:** Depending on the materials stored in the neighbourhood use following extinguishing media: foam, water spray, dry chemical powder, CO<sub>2</sub>. No unsuitable extinguishing media known.

**5.2 Special hazards arising from the substance or mixture**

- Exposure hazards:** Hazardous decomposition / combustion products: produces oxides of nitrogen on combustion: N<sub>y</sub>O<sub>x</sub> and also CO, CO<sub>2</sub>

**5.3 Advice for firefighters**

- Advice for fire-fighters:** Fire-fighters should wear suitable protective clothing such as boots, overalls, gloves, eye and face protection and breathing apparatus.
- Additional provisions:** Do not allow fire-fighting water to enter surface or groundwater.

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**Section 6: Accidental release measures**

**General advice:** Do not flush into public water course. Do not empty into drains, ground or surface water and soil. If the product enters drains or water, immediately inform appropriate authorities.

**6.1 Personal precautions, protective equipment and emergency procedures**

**Personal precautions:** Ensure adequate ventilation. Use personal protective equipment - see section 8.

**6.2 Environmental precautions**

**Environmental precautions:** Do not let product enter drains. If the product enters drains or water, immediately inform appropriate authorities.

**6.3 Methods and material for containment and cleaning up**

**Clean-up procedures:** Sweep up. Contain spillage and then collect by wet brushing and place in container for disposal according to local regulations. After removal, wash contaminated area with water.

**6.4 Reference to other sections**

**Reference to other sections:** For disposal see Section 13. For personal protective equipment see Section 8.

**Section 7: Handling and storage**

**7.1 Precautions for safe handling**

**Precautions for safe handling:** Avoid formation of dust. Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment according to Section 8. Do not dispose into the sewage system.

**7.2 Conditions for safe storage, including any incompatibilities**

**General conditions for storage:** Keep in original, tightly closed container in a dry place. Keep away from heat and sources of ignition. Recommended storage temperature: -5°C to +30°C.

**7.3 Specific end use(s)**

**Specific end use(s):** No data is available for this product.

**Section 8: Exposure controls/personal protection**

**8.1 Control Parameters**

Substances whose occupational exposure limits have to be monitored in the work environment.  
There are no environmental limits for the substances contained in the product.

**DNEL (Workers):** Non-applicable  
**DNEL (General population):** Non-applicable  
**PNEC:** Non-applicable

## 8.2 Exposure controls



### A - General security and hygiene measures in the work place

Handle in accordance with good industrial hygiene and safety practice. Change contaminated clothing. Avoid contact with skin, Avoid breathing dust. Wash hands after working with substance. When using do not eat or drink. Immediately remove spilled substance.

### B - Specific Respiratory Protection

No personal respiratory protective equipment normally required. In case of insufficient ventilation wear suitable respiratory equipment.

### C - Specific protection for the hands

Handle with protective gloves (recommended nitrile gloves, layer thickness 0.11mm and breakthrough time > 480 minutes).

### D - Ocular and facial protection

Use safety goggles.

### E - Bodily protection

Wear suitable protective clothing.

### Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. Prevent further leakage or spillage if safe to do so

### Volatile organic compounds

Non-applicable

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**Section 9: Physical and chemical properties**

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

Appearance:	Solid, brown microgranule
Odour:	Odourless
Odour threshold:	Not applicable
pH value, 1.0% (w/v) solution:	5.5 ± 0.5
Melting point/freezing point:	No data available
Initial boiling point:	201.1 ± 0.4°C ÷ 203.8 ± 0.5°C
Flash point:	690 °C
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits:	Not applicable
Vapour pressure:	No data available
Vapour density:	Not applicable
Relative/bulk density:	0.65 g/cm <sup>3</sup>
Viscosity:	Not applicable
Explosive properties:	No data available
Oxidising properties:	No data available

**9.2 Other Information**

Iron (Fe)	9.5 ± 0.4%
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**Section 10: Stability and reactivity**

**10.1 Reactivity**

**Reactivity:** The substance has low chemical reactivity

**10.2 Chemical stability**

**Chemical stability:** Stable under normal conditions of use and storage

**10.3 Possibility of hazardous reactions**

**Hazardous reactions:** No data available

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**10.4 Conditions to avoid**

**Conditions to avoid:** Keep away from heat

**10.5 Incompatible materials**

**Incompatible materials:** None

**10.6 Hazardous decomposition products**

**Haz. Decomposition Products:** In the event of fire produces oxides of nitrogen  $N_xO_x$

**Section 11: Toxicological information**

**11.1 Information on toxicological effects**

**Acute toxicity:** Not harmful

According to REACH regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 with amendments

Substance name	% w/w	Method	Result	Units
Fe(III)IDHA	100	LD <sub>50</sub> (oral, rat, OECD 420/Method B.1 Bis)	> 2000	mg/kg
		LD <sub>50</sub> (dermal, rat, OECD 402/ EU Method B.3)	>2000	mg/kg b.w.

**Skin corrosion/irritation:** not irritating (OECD Guideline No 404 / Method B.4.)  
**Serious eye damage/irritation:** Not irritating (OECD Guideline No 405 / Method b.5.)  
**Respiratory or skin sensitisation:** May cause an allergic skin reaction (OECD 406)  
**Germ cell mutagenicity:** No data available  
**Carcinogenicity:** No data available

**Reproductive toxicity:** Not harmful  
**Specific target organ toxicity (STOT)** Not harmful  
- **Single exposure:**  
**Specific target organ toxicity (STOT)** Not harmful  
- **Repeated exposure:**  
**Aspiration hazard:** Not applicable (solid substance)

**Potential health effects:** No data available

**Signs and symptoms of exposure:** No data available

**11.2 Specific toxicology information on the substances**

No data available

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**Section 12: Ecological information**

**12.1 Toxicity**

Substance name	% w/w	Method	Result	Unit
FE(III)IDHA	100	LC <sub>50</sub> (fish, 96h, OECD 203)	>100	mg/L
		EC <sub>50</sub> (Daphnia magna, 48h, OECD 202)	>100	mg/L
		E <sub>T</sub> C <sub>50</sub> (algae, 72h, OECD 201)	>100	mg/L
		E <sub>V</sub> C <sub>50</sub> (algae, 72h, OECD 201)	>100	mg/L
		NOEC/72h	>100	mg/L

**12.2 Persistence and degradability**

Biodegradation acc. OECD 302 B 92% after 28 days.  
Biodegradation acc. OECD 301 E 81% after 28 days.

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

The substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of the REACH Regulation. Chemical safety assessment not required (not conducted).

**12.6 Other adverse effects**

No data available

**Section 13: Disposal considerations**

**13.1 Waste treatment methods**

**Waste treatment methods:** Dispose of waste and residues in accordance with local authority requirements.

**Disposal of packaging:** Do not reuse empty containers. Dispose of empty container in compliance with local and national regulations.



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**Section 14: Transport information**

**14.1 UN Number**

This product is not classified as dangerous for carriage.

**14.2 UN proper shipping name**

The product is not classified as dangerous for carriage.

**14.3 Transport hazard class(es)**

This product is not classified as dangerous for carriage.

**14.4 Packaging group**

The products is not classified as dangerous for carriage.

**14.5 Environmental hazards**

The product is not classified as dangerous for carriage.

**14.6 Special precautions for user**

The product is not classified as dangerous for carriage.

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code**

The product is not classified as dangerous for carriage.

**Section 15: Regulatory information**

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

**Specific regulations:**

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC with amendments.

COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending regulation (EC)No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

REGULATION (EC) No 1727/2008 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) of 16 December 2008 on classification, labelling and packaging of substances and mixture, amending and repealing Directives 6/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; with amendments  
Regulation (EU) No 946/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on Persistent organic Pollutants and amending Directive 79/117/EC

European Agreement Concerning the Carriage of Dangerous Goods by Road (ADR), 2015

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**15.2 Chemical Safety Assessment**

**Chemical safety assessment:** No data available

**Section 16 Other information**

**Legislation related to safety data sheets:**

This safety data sheet has been designed in accordance with Annex II-Guide to the compilation of safety data sheets of Regulation (EC) N° 1907/2006 (Regulation (EU) N° 453/2010, Regulation (EC) N° 2015/830)

**Modifications related to the previous security card which concerns the ways of managing risks:**

Non-applicable

**Texts of the legislative phrases mentioned in section 2:**

H317 - May cause an allergic skin reaction

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3.

**CLP Regulation (EC) n° 1272/2008:**

Skin Sens. 1B: H317 - May cause and allergic skin reaction

**Legal disclaimer:**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

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**Engage Agro Europe Ltd**

Chorley Business & Technology Centre | Euxton Lane | Euxton | Chorley | Lancashire PR7 6TE

T: +44 (0) 1257226590

E: [info@engage-agro.com](mailto:info@engage-agro.com)

[www.engageagroeuropa.com](http://www.engageagroeuropa.com)