

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

- 1.1 Product Identifier:** **SEAWEED PLUS SEQUESTERED IRON**
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Plant growth stimulant.
- 1.3 Manufacturer/Distributor:** Vitax Ltd, Owen Street, Coalville, Leicestershire LE67 3DE United Kingdom
Tel: 01530 510060 Email: info@vitax.co.uk
- 1.4 Emergency Contact:** Tel: 01530 510060 (Office Hours)

2. HAZARDS IDENTIFICATION

- 2.1 Classification:** **Classification according to Regulation (EC) No 1272/2008 (EU-GHS/CLP)**
- Physical hazards** Not Classified
- Health hazards** Not Classified
- Environmental hazards** Not Classified
- 2.2 Label Elements:** n/a
- Signal word:** n/a
- Hazard statements:** n/a
- Precautionary Statements** n/a
- 2.3 Other Hazards:** No additional information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

- 3.2 Mixture:** Aqueous seaweed extract with sequestered iron.

Chemical Name	CAS-No./ EINECS-No.	Annex Index or REACH number	Symbol(s) and phrases	Concentration
Ferrous Sulphate	7782-63-0/ 231-753-5	026-003-01-4 Index number 01-2119513203-57-XXXX REACH registration number	GHS07 Acute Tox. 4 H302: Harmful if swallowed Skin Irrit. 2 H315: Causes skin irritation Eye Irrit. 2 H319: Causes serious eye irritation	<10%

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

- Eye contact –** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists: Get medical advice/attention.
- Skin contact –** IF ON SKIN: wash with plenty of soap and water. If irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse..
- Ingestion –** Wash out mouth with water and seek medical advice.
- Inhalation –** IF INHALED: Remove victim to fresh air in a position comfortable for breathing. If unwell seek medical advice/attention.

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

- Skin Contact:** Repeated and/or prolonged contact may cause irritation.
- Eye Contact:** May cause irritation to eyes.
- Ingestion:** May cause irritation of gastro intestinal tract leading to nausea, vomiting, abdominal pain and diarrhoea.
- Inhalation:** High concentrations of dust may be irritating to trachea and lungs.

4.3 Indication of immediate medical attention and special treatment needed:

Not available.

5. FIRE FIGHTING MEASURES

Non flammable

- 5.1 Extinguishing Media:** If involved in a fire use water spray or dry powder.

5.2 Special hazards arising from substance or mixture:

In intense heat, product decomposition will release toxic fumes.

5.3 Advice for firefighters:

Wear self-contained breathing apparatus in confined spaces. Contain contaminated run-off.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal Precautions:** Wash hands and exposed skin after handling.
- 6.2 Environmental precautions:** Do not allow to enter drains or sewers.
- 6.3 Methods and material for containment and cleaning up:**
Soak up with absorbent material such as sand and transfer to suitable container.

7. HANDLING & STORAGE

- 7.1 Precautions for Safe Handling:** Do not block stack pallets.
- 7.2 Conditions for Safe Storage:** Store in original containers, tightly closed in a secure, well ventilated, cool but frost-free, dry area. Store clear of foodstuffs and in a separate stack from herbicides.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters:

DNELs

Worker

Acute systemic effects, dermal: (FeSO₄*7H₂O) 2.8 mg/kg/d
 Acute systemic effects, inhalative: (FeSO₄*7H₂O) 9.9 mg/m³
 Systemic long-term effects, dermal: (FeSO₄*7H₂O) 2.8 mg/kg/d
 Systemic long-term effects, inhalative: (FeSO₄*7H₂O) 9.9 mg/m³

Consumer

Acute systemic effects, oral: (FeSO₄*7H₂O) 1.4 mg/kg/d
 Acute systemic effects, dermal: (FeSO₄*7H₂O) 1.4 mg/kg/d
 Acute systemic effects, inhalative: (FeSO₄*7H₂O) 2.5 mg/m³
 Systemic long-term effects, oral: (FeSO₄*7H₂O) 1.4 mg/kg/d
 Systemic long-term effects, dermal: (FeSO₄*7H₂O) 1.4 mg/kg/d
 Systemic long-term effects, inhalative: (FeSO₄*7H₂O) 2.5 mg/m³

PNECs

The PNECs given in this section were derived based on the concentration which would cause a 10% increase above typical natural background levels of iron in soil and sediment. Thus the respective PNEC is equal to 110% of the typical natural background level of iron.

Water

Iron is an essential trace element for fish, aquatic invertebrates and plants. A direct toxicity could not be demonstrated in tests. Therefore no PNEC was derived.

Sewage treatment plants (STP)

PNEC STP Fe: 500 mg/l; FeSO₄*7H₂O: 2483 mg/l

Sediment PNEC Sediment (freshwater):

Fe: 49.5 g/kg; FeSO₄*7H₂O: 246 g/kg dry weight

PNEC Sediment (marine water):

Fe: 49.5 g/kg; FeSO₄*7H₂O: 246 g/kg dry weight

Soil PNEC soil:

Fe: 55.5 g/kg; FeSO₄*7H₂O: 276 g/kg dry weight

8.2 Exposure Controls:

No specific personal protective equipment assigned. Normal good industrial hygiene practices should be observed.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance	brown liquid
Odour	distinctive marine odour
pH	4-5
Boiling point	not available
Melting point	not available
Flash point	not available
Flammability	not available
Autoflammability	not available
Explosivity	not available
Oxidising properties	not available
Vapour Pressure	not available
Relative density	1.1
Solubility	soluble in water
Other data	none

10. STABILITY & REACTIVITY

- 10.1 Reactivity:** no data
- 10.2 Stability:** Stable under normal conditions.
- 10.3 Possibility of hazardous reactions:** no data
- 10.4 Conditions to Avoid:** Store away from direct sunlight between 0° and 30°C
- 10.5 Incompatible materials:** no data.
- 10.6 Hazardous Decomposition Products:**
Decomposes at high temperatures producing toxic nitrogen oxide fumes.

11. TOXICOLOGICAL INFORMATION

Not classified as harmful by inhalation, ingestion or in contact with skin. Ingestion of large quantities may cause gastric disturbance. Data for iron sulphate:

Acute toxicity

LD/LC50 values that are relevant for classification:

Data from the Key Studies for iron sulphates and iron chlorides:

Oral LD50 132 - 881 mg Fe/kg (rat) (OECD 423)
 Dermal LD50 >400 mg Fe/kg (rat) (OECD 402)
 Inhalative LC50 no relevant data available

Data for ferrous sulphate heptahydrate:

Oral LD50 657 - 4390 mg/kg (rat) (derived)
 LD50 >2000 mg/kg (rat) (OECD 401)
 Dermal LD50 >1992 mg/kg (rat) derived
 Inhalative LC50 no relevant data available

Primary irritant effect:

on the skin: OECD 404:

Irritant for skin and mucous membranes,

on the eye: OECD 405:

Irritant effect.

Sensitization: OECD 429 (LLNA-test);

No sensitizing effects.

Subacute to chronic toxicity:

Data of the Key Studies for iron sulphates and iron chlorides:

Oral NOAEL 57 - 65 mg Fe/kg/d (rat, 90 days) (not according to OECD)
 Dermal NOAEL no relevant data available
 Inhalative NOAEC no relevant data available

Data for ferrous sulphate heptahydrate

Oral NOAEL 284 - 324 mg/kg/d (rat, 90 days) (derived)
 NOAEL 100 mg/kg/d (rat, 49 days)
 Dermal NOAEC no relevant data available
 Inhalative NOELL no relevant data available

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

There are no indications of CMR effects.

Specific target organ toxicity (STOT)

No specific target organ toxicity according to the criteria defined in Regulation (EC) No. 1272/2008.

Aspiration hazard

No relevant data available, not an aspiration hazard.

To the best of our knowledge physical, chemical and toxicological properties have not been fully investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity:

not classified as hazardous. Natural plant growth regulator, provides micro-nutrients essential to plant growth.

12.2 Persistence and degradability:

no data

12.3 Bioaccumulative potential:

no data

12.4 Mobility in soil:

no data.

12.5 Results of PBT and vPvB:

not classified.

12.6 Other adverse data:

no data

13. DISPOSAL CONSIDERATIONS

Disposal route should not permit nitrate contamination of groundwater.

13.1 Waste treatment methods:

Dispose of waste through a reputable waste disposal contractor in accordance with the Environmental Protection Act 1990.

14. TRANSPORT INFORMATION

Not classified as hazardous for transport.

15. REGULATORY INFORMATION

Not classified as dangerous for supply.

15.1 Safety, health and environmental regulations/legislation specific to this substance:

This substance is classified and labelled according to Directive EC 1272/2008 Classification, Labelling and Packaging and the EC Fertiliser Regulations 2003, 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, including amendments.

15.2 Chemical Safety Assessment

not undertaken for this substance



SAFETY INFORMATION SHEET

Date of Issue: February 2004

Revision: December 2020

16. OTHER INFORMATION

Reason for revision:

Replaces version dated February 2016. Section 1 updated.

SDS information:

The product label provides information on the use of the product: do not use otherwise, unless you have assessed any potential hazard involved and the safety measures required. Prepared by VITAX LTD, for Health and Safety purposes from the best knowledge available at the time of printing.