

Material Safety Data Sheet

Fraser Selective Supplement, Component 1



According to Regulation (EC) No. 1907/2006
Version 2.0, Issue Date: 2015-07-14, Replaces version: 2004-12-06

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

1.1 Product Identifier

Article number

TN 1318

Trade name

Fraser Selective Supplement, Component 1: Ammonium iron(III)citrate-Supplement

| | |
|-----------------------------|---|
| Substance: | Ammonium iron(III)-citrate |
| EC-No.: | 214-686-6 |
| CAS-No.: | 1185-57-5 |
| Registration number: | A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline. |

1.2 Relevant Identified uses of the substance or mixture and uses advised against

Intended use

Used for the selective enrichment and detection of *Listeria* spp. from food and environmental material in conjunction with Fraser Broth (Base) TN 1257.

Uses advised against: -

1.3 Details of the supplier of the Safety data sheet

Name of supplier

sifin diagnostics gmbh
Berliner Allee 317-321
13088 Berlin, Germany

Contact for technical information

Telefon: +49 (0)30 927030-0 (Head of Department Culture Media)
Telefax: +49 (0)30 927030-30
E-Mail: info@sifin.de

E-Mail, competent person

msds@conceptec.de




1.4 Emergency telephone number

Phone: +49 (0)30-927030-0, Safety Officer for Medical Devices
Mo. – Th. 7.30 a.m. – 4.15 p.m., Fr. 7.30 a.m. – 3.00 p.m.


SECTION 2: Hazards Identification

2.1 Classification of the mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

-  Skin corrosion/irritation, Category 2, H315
-  Serious eye damage/eye irritation, Category 2, H319
-  Specific target organ toxicity - single exposure, Category 3, H335

Classification according to Directive 1999/45/EG (DPD)

-  Xi, Irritant, R36/37/38

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2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)

| | |
|---|---|
| Hazard elements for labelling, contains | Ammonium iron(III)citrate |
| Hazard pictogramme(s) | |
| Signal word | Warning |
| Hazard statements (H-statement) | H315: Causes skin irritation. H319: Causes serious eye irritation. H335: May cause respiratory irritation. |
| Precautionary Statements (P-statement) | P261: Avoid breathing dust. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |

2.3 Other hazards

None known. Minimum standards for protection measures (TRGS 500) as common in the chemical industry should be followed.

SECTION 3: Composition/Information on Ingredients

3.1 Substance

| | |
|-------------------|--|
| Synonyms: | Ferric ammonium citrate, Ammonium ferric citrate |
| Formula | $C_6H_8O_7 \cdot x Fe^{3+} \cdot y NH_3$ |
| Molecular weight: | - |

Hazardous ingredients

| Substance name | CAS-No. | EC-No. | REACH-No. |
|---------------------------|----------------------------|--|-----------|
| Ammonium iron(III)citrate | 1185-57-5 | 214-686-6 | - |
| Conc. (w/w %) | Classification acc. to DSD | Classification acc. to CLP | Note |
| 100 % | Xi, R36/37/38 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 | [1] |

[1] = Hazardous or environmentally harmful substance; [2] = substance with a Community workplace exposure limit; [3] = PBT substance; [4] = vPvB substance; [5] = SVHC-candidate (substance of very high concern).
For the full text of the R-phrases / H-Statements mentioned in this section, see section 16.

SECTION 4: First-Aid-Measures

4.1 Description of First-Aid-Measures

General Advice: Immediately remove any clothing soiled by the product.
Inhalation: Fresh air. Consult a doctor if feeling unwell.
Skin contact: Wash off with plenty of water. Remove contaminated clothing.
Eye contact: Rinse off with plenty of water. Call an ophthalmologist.
Ingestion: Immediately make victim drink water (two glasses at most). Consult a physician.

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4.2 Most important symptoms and effects, both acute and delayed

The following applies to soluble iron compounds: Nausea and vomiting after swallowing. The absorption of large quantities is followed by cardiovascular disorders. Toxic effects on liver and kidneys.
The following applies to soluble ammonium salts: after swallowing local irritation symptoms, nausea, vomiting, diarrhoea. Systemic effect: after uptake of large quantities: drop of blood pressure, collapse, CNS-disorders, spasms, narcotic conditions, respiratory paralysis, haemolysis.

4.3 Indications of any immediate medical attention and special treatment

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water spray jet, carbon dioxide (CO₂), foam, extinguishing powder.
Unsuitable extinguishing media: Water full jet

5.2 Special Hazards arising from the substance or mixture

Hazardous combustion products: Carbon oxides, Nitrogen oxides (NO_x), iron oxide

5.3 Advice for fire fighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing (see Section 8).
Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Do not breathe dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area. Wear appropriate protective equipment (see Section 8).

6.2 Environmental precautions

Do not allow to enter drains or aquatic systems.

6.3 Methods and material for containment and cleaning up:

Cover drains. Collect, bind and pump off spills. Observe possible material restrictions (see Section 7.2 and 10.5). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See Section 7 for Handling and Storage, Section 8 for appropriate personal protective equipment and Section 13 for Disposal considerations.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
Precautions against fire and explosion: No special measures necessary.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storing conditions:
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: light protected, 2...8 °C.
Packaging materials: Keep only in the original container.
Conditions for storage rooms and vessels: No special measures necessary.
Hints for joint storage: Store separate from products of the following storage classes: 1, 5.1A, 6.2, 7.
Joint storage with products of storage classes 2.1, 3, 4.1A, 4.2, 4.3, 5.1B-C, 5.2, 6.1A-B allowed, if specific conditions are kept (for further information: see Section 7.2 TRGS 510).
Storage class: 10-13

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7.3 Specific end use(s)

None known.

SECTION 8: Exposure controls / Personal protective equipment

8.1 Control parameters

Exposure limits

| Substance | CAS-No. | Value | Limit value | Source |
|-----------|---------|-------|-------------|--------|
| - | - | - | - | - |

Control- and monitoring procedures: see for example "NIOSH Manual of Analytical Methods", National Institute for Occupational Safety and Health.

DNEL- / DMEL-Value

| | | |
|-----------|---|---|
| Substance | - | - |
| EC-No. | - | - |
| CAS-No. | - | - |

| Exposure Route | Species/ Time of exposure/ Effect | Value | Note |
|----------------|-----------------------------------|-------|------|
| - | - | - | - |

PNEC-Value

| | | |
|-----------|---|---|
| Substance | - | - |
| EC-No. | - | - |
| CAS-No. | - | - |

| Environmental compartment | Species / Time of exposure / Effect | Value |
|---------------------------|-------------------------------------|-------|
| - | - | - |

8.2 Exposure controls

Appropriate engineering controls: Technical measures and appropriate working procedures should be given priority over the use of personal protective equipment.

Individual protection measures, such as personal protective equipment: Do not breathe dusts. Avoid skin and eye contact.

| | | |
|----------------------|---|-----------------|
| Hygienic measures | Keep away from food and feeding stuff. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Separate storage of protective clothing. | |
| Skin protection | Protective clothing. | |
| Hand protection | Nitrile rubber | |
| | Full contact: | Splash contact: |
| Glove material | Nitrile rubber | Nitrile rubber |
| Glove thickness (mm) | ≥ 0.11 mm | ≥ 0.11 mm |

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| | | |
|--|---|---------------------------|
| Break through time (min) | ≥ 480 min | ≥ 480 min |
| | <p>The glove material has to be impermeable and resistant to the product. Due to missing tests no recommendation to the glove material can be given for the product.</p> <p>Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.</p> <p>The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.</p> | |
| Respiratory protection | Respiratory protection in case of dust formation. Filtering device: Filter P2. | |
| Eye/ face protection | Goggles. | |
| Thermal hazards | None known. | |
| Others | None known. | |
| Environmental Exposure controls | - | Do not empty into drains. |

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|--|--|
| Appearance | Solid |
| Form | Powder |
| Particle size | Not determined |
| Colour | Brown. |
| Odour | Nearly odourless |
| Odour threshold | No data available |
| pH | ~ 6-8 (100 g/l H ₂ O, at 20 °C) |
| Melting point / freezing point | No data available |
| Initial boiling point and boiling range | No data available |
| Flash point | No data available |
| Evaporation rate | No data available |
| Flammability (solid, gas) | No data available |
| Lower flammability or explosive Limits | No data available |
| Upper flammability or explosive Limits | No data available |
| Minimum ignition energy | No data available |
| Vapour pressure | No data available |
| Relative density | No data available |
| Solubility(ies) | Ca. 1200 g/l (at 20 °C) |
| Partition coefficient; n-octanol/water | No data available |
| Auto-ignition temperature | No data available |

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| | |
|----------------------------------|--------------------------------------|
| Decomposition temperature | No data available |
| Thermal decomposition | No data available |
| Viscosity | No data available |
| Explosive properties | The product itself is not explosive. |
| Oxidising properties | The product itself is not oxidizing. |

9.2 Other Information

| | |
|----------------------------|-----------------------|
| Density | No data available |
| Bulk density | 750 kg/m ³ |
| Further information | Not applicable |

SECTION 10: Stability and reactivity

10.1 Reactivity

Dangerous reactions are not expected handling the product according to the intended use.

10.2 Chemical Stability

The product is chemically stable under standards ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

See Section 10.1.

10.4 Conditions to avoid

Strong heating

10.5 Incompatible materials

Strong oxidants.

10.6 Hazardous decomposition products

Hazardous combustion products: Carbon oxides, Nitrogen oxides (NO_x), iron oxide.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity

| Exposition | LD50/LC50-Value | Species/test system | Source |
|------------|-----------------|---------------------|--------|
| Oral | > 2000 mg/kg | Rat | RTECS |

May be harmful if swallowed. May be harmful if inhaled. Causes respiratory tract irritation.

Skin irritation

May be harmful if absorbed through skin. Causes skin irritation.

Eye irritation

Causes serious eye irritation.

Sensitisation: No data available.

Repeated dose toxicity: No data available.

Mutagenicity: No data available.

Carcinogenicity: No data available.

Toxic for reproduction: No data available.

STOT – single exposure: No data available.

STOT – repeated exposure: No data available.

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11.2 Further Information

Symptoms related to the physical, chemical and toxicological characteristics: No data available.
Further toxicological information: No data available.
Other information: No data available.

SECTION 12: Ecological information

12.1 Toxicity

| Toxicity | Species/test system | Value |
|------------------|--------------------------------------|---------|
| Toxicity to fish | | |
| LC0 | Fundulus heteroclitus (Gambusia), 7d | 200 g/l |

12.2 Persistence and degradability

Biodegradation

| Method | Elimination rate | Classification | Source |
|--------|------------------|----------------|--------|
| - | - | - | - |

Biodegradation/Further Information: No data available.
Further Information: No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil:

No data available.

12.5 Results of der PBT & vPvB assessment

Product does not contain substances which meet the PBT/vPvB criteria of REACH, annex XIII.

12.6 Other adverse effects

Further information on ecology: Do not allow to run into surface water, wastewater or soil.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product: Recommendation: Waste can be disposed of in appropriate and approved facilities in compliance with applicable technical regulations following consultation with approved waste disposal management companies and authorities in charge.

Uncleaned Packaging: Recommendation: Completely emptied packages can be recycled. Packing which cannot be properly cleaned must be disposed of. Observe local/state/federal regulations.

Cleaned Packaging: Non-contaminated packages must be recycled or disposed of.

Waste codes / waste designations according to EWC / AVV: The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

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SECTION 15: Regulatory information

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

National and local regulations must be observed. For information on labelling please refer to section 2 of this document.

EU legislations: Not subject to Directive 96/82/EG.

National Regulations: -

Restrictions to occupation: Observe employment restrictions for pregnant and nursing mothers according to the 'mother protection guideline' (92/85/EEC). Observe restrictions to employment for juveniles according to the 'protection of young people at work directive' (94/33/EC).

TA Air

| CAS-No. | Substance | Number | Class |
|---------|-----------|--------|-------|
| - | - | - | - |

Water hazard class: 1 (classification according to Annex 4 VwVwS (Deutschland)).

15.2 Chemical safety assessment

For this product a chemical assessment was not carried out.

SECTION 16: Other Information

Further Information: None.

Full text of R-phrases referred to under Sections 2 and 3

| R-phrases | Text |
|-----------|--|
| 36/37/38 | Irritating to eyes, respiratory system and skin. |

Full text of H-Statements referred to under Sections 2 and 3

| H-statement | Text |
|-------------|-----------------------------------|
| 315 | Causes skin irritation. |
| 319 | Causes serious eye irritation. |
| 335 | May cause respiratory irritation. |

Further Information: The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Changes: The present MSDS is a completely revised MSDS fulfilling the requirements of Annex II of Regulation (EC) 1907/2006 and Annex II of Regulation (EC) 453/2010.