

## Half Fraser (Demi-Fraser) Broth

Revision 3  
Revision date 2020-04-20

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

#### 1.1. Product identifier

Product name	Half Fraser (Demi-Fraser) Broth
Product code	NCM0001

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

Product Use	[SU3] Industrial uses: Uses of substances as such or in preparations at industrial sites; [PC21] Laboratory chemicals; [PROC15] Use as laboratory reagent;
Description	Intended for laboratory use only. For in vitro use only.

#### 1.3. Details of the supplier of the safety data sheet

Company	Solus Scientific Solutions Limited
Address	9 Mansfield Networkcentre, Millennium Business Park Concord Way, Mansfield, NG19 7JZ UK
Web	www.solusscientific.com
Telephone	+44 (0)1623 429701
Email	Solus.info@perkinelmer.com

#### 1.4. Emergency telephone number

	+44 (0)1623 429701
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### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

2.1.2. Classification - EC 1272/2008	STOT SE 3: H335;
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#### 2.2. Label elements

Hazard pictograms	
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## 2.2. Label elements

Signal Word	Warning
Hazard Statement	STOT SE 3: H335 - May cause respiratory irritation.
Precautionary Statement: Prevention	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P271 - Use only outdoors or in a well-ventilated area.
Precautionary Statement: Response	P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 - Call a POISON CENTER/doctor/ /if you feel unwell.
Precautionary Statement: Storage	P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to an approved waste disposal facility in accordance with local and national regulations.

## 2.3. Other hazards

Other hazards	Dust may be irritating if inhaled. Contains substance(s) which are hazardous to the environment.
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## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Lithium Chloride		7447-41-8	231-212-3		1 - 10%	Acute Tox. 4: H302; Skin Irrit. 2: H315; Eye Irrit. 2: H319; STOT SE 3: H335; Aquatic Acute 3: H402;

#### Description

	Concentrations listed are not product specifications.
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#### Further information

	Full text of Hazard Statements listed in this Section is provided in Section 16.
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## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air. If breathing is difficult give oxygen. If breathing stops, provide artificial respiration. Seek medical attention if irritation or symptoms persist.
Eye contact	Rinse immediately with plenty of water. Contact lenses should be removed. Seek medical attention if irritation or symptoms persist.
Skin contact	Remove contaminated clothing. Wash with soap and water. Seek medical attention if irritation or symptoms persist.
Ingestion	Do not induce vomiting unless told to do so by the poison control center or doctor. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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

Inhalation	May cause irritation to respiratory system.
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## 4.2. Most important symptoms and effects, both acute and delayed

Eye contact	May cause irritation to eyes.
Skin contact	May cause irritation to skin.
Ingestion	Ingestion may cause nausea and vomiting.

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

	Remove the affected person from the source of contamination immediately. Transfer to hospital if there are burns or symptoms of poisoning. Seek medical attention if irritation or symptoms persist. If medical advice is needed, have product container or label at hand.
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

	Use extinguishing media appropriate to the surrounding fire conditions.
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### 5.2. Special hazards arising from the substance or mixture

	Avoid formation of dust. Do not allow undiluted product to be released to ground water, water course or sewage system.
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### 5.3. Advice for firefighters

	Do not breathe dust or vapour. Wear suitable respiratory equipment when necessary.
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## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

	Avoid formation of dust. Use as appropriate: Protective equipment, Protective clothing. Ensure adequate ventilation of the working area. Avoid prolonged or repeated exposure.
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### 6.2. Environmental precautions

	Prevent further spillage if safe. Clean spillage area thoroughly with plenty of water. Do not flush into surface water. Do not let product contaminate subsoil.
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### 6.3. Methods and material for containment and cleaning up

	Avoid formation of dust. Clean spillage area thoroughly with plenty of water. Do not contaminate water by cleaning of equipment or disposal of wastes.
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### 6.4. Reference to other sections

	See Section(s) 2, 8, and 13 for further information.
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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

	Adopt best Manual Handling considerations when handling, carrying and dispensing. Avoid contact with eyes. Do not eat, drink or smoke in areas where this product is used or stored. Ensure adequate ventilation of the working area. Do not contaminate water by cleaning of equipment or disposal of wastes. Use as appropriate: Protective clothing. Read the entire label and follow all use directions, restrictions, and precautions.
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### 7.2. Conditions for safe storage, including any incompatibilities

	Store in correctly labelled containers. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal. Follow label instructions.
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### 7.3. Specific end use(s)

	See Section(s) 1.2 for further information.
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## Further information

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## Further information

Refer to product label and/or package insert for additional information.

## SECTION 8: Exposure controls/personal protection

### 8.2. Exposure controls



#### 8.2.1. Appropriate engineering controls

Ensure adequate ventilation of the working area.

#### 8.2.2. Individual protection measures

Use as appropriate: Protective equipment.

#### Eye / face protection

Use as appropriate: Suitable eye protection.

#### Skin protection - Handprotection

Use as appropriate: Chemical-resistant gloves made of any waterproof material.

#### Skin protection - Other

Use as appropriate: Protective clothing.

#### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Occupational exposure controls

Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects. Protect clothing from contact with the product. Provide chemical shower. Provide eye wash station.

## Further information

Refer to product label for additional PPE requirements and recommendations. Follow label instructions.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

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## 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Powder
<b>Colour</b>	Beige
<b>Odour</b>	Characteristic/Mild
<b>Odour threshold</b>	No data available
<b>pH</b>	7 - 7.4
<b>Melting point</b>	No data available
<b>Freezing Point</b>	No data available
<b>Initial boiling point</b>	No data available
<b>Flash point</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Vapour density</b>	No data available
<b>Relative density</b>	No data available
<b>Partition coefficient</b>	No data available
<b>Autoignition temperature</b>	No data available
<b>Viscosity</b>	Not applicable.
<b>Explosive properties</b>	No data available
<b>Oxidising properties</b>	No data available
<b>Solubility</b>	Soluble in water

## 9.2. Other information

<b>Benzene Content</b>	Not applicable.
<b>Lead content</b>	Not applicable.
<b>VOC (Volatile organic compounds)</b>	Not applicable.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

	Stable under normal conditions.
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### 10.2. Chemical stability

	Stable under normal conditions.
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### 10.3. Possibility of hazardous reactions

	Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.
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### 10.4. Conditions to avoid

	Keep away from extreme temperatures, Moisture.
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### 10.5. Incompatible materials

	No data available.
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### 10.6. Hazardous decomposition products

	Carbon oxides.
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

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## 11.1. Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met. However, this product does contain substance(s) that are classified as hazardous. For more information, see Section 3.
Skin corrosion/irritation	May cause irritation to skin.
Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitisation	May cause allergic reactions in susceptible people.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	No components at >0,01% are listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. No components at >0.01% are listed in the International Agency for Research on Cancer (IARC) Monographs. No components at >0,01% are listed in the National Toxicology Program (NTP) Report on Carcinogens. Not listed in the OSHA standard 1910.1003 Carcinogens.
Reproductive toxicity	No teratogenic effects reported.
STOT-single exposure	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT-repeated exposure	No Significant Hazard.
Aspiration hazard	No Significant Hazard.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible.

### 11.1.2. Mixtures

	See Section(s) 3 for further information.
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### 11.1.3. Hazard Information

	See Section(s) 2 and 3 for further information.
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### 11.1.4. Toxicological Information

	No data available
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### 11.1.5. Hazard Class

	See Section(s) 2 and 14 for further information.
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### 11.1.6. Classification Criteria

	Based on the Globally Harmonised System (GHS) considerations for the classification of mixtures. See Section 15 for regulatory citations.
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### 11.1.7. Information on likely routes of exposure

	Eye contact. Skin contact. Inhalation. Ingestion.
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### 11.1.8. Symptoms related to the physical, chemical and toxicological characteristics

	See Section(s) 4.2 for further information.
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### 11.1.9. Delayed and immediate effects as well as chronic effects from short and long-term exposure

	See Section(s) 4.2 for further information.
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### 11.1.10. Interactive effects

	No data available.
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### 11.1.11. Absence of specific data

	<1% of this mixture consists of ingredients of unknown acute toxicity.
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### 11.1.12. Mixture versus substance information

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## 11.1.12. Mixture versus substance information

See Section(s) 3 for further information.

## 11.1.13. Other information

No data available.

## SECTION 12: Ecological information

### 12.1. Toxicity

No data available

### 12.2. Persistence and degradability

No data is available on this product.

### 12.3. Bioaccumulative potential

No data is available on this product.

### Partition coefficient

Half Fraser (Demi-Fraser) Broth No data available

### 12.4. Mobility in soil

No data is available on this product.

### 12.5. Results of PBT and vPvB assessment

No data is available on this product.

### 12.6. Other adverse effects

Contains substance(s) which are hazardous to the environment. Specific test data for the substance or mixture is not available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Dispose of in compliance with all local and national regulations. Follow label instructions.

### Disposal methods

Do not contaminate water by cleaning of equipment or disposal of wastes. Do not flush into surface water. Dispose of in compliance with all local and national regulations.

### Disposal of packaging

Nonrefillable container. Do not reuse or refill this container.  
If empty: Do not reuse this container. Place in trash or offer for recycling, if available.  
If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

### Further information

Refer to product label and/or package insert for additional information. Follow label instructions.

## SECTION 14: Transport information

### 14.1. UN number

The product is not classified as dangerous for carriage.

### 14.2. UN proper shipping name

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## 14.2. UN proper shipping name

The product is not classified as dangerous for carriage.

## 14.3. Transport hazard class(es)

The product is not classified as dangerous for carriage.

## 14.4. Packing group

The product 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

<b>Regulations</b>	1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
<b>Chemical Inventories/Right-to-Know Lists:</b>	<p>--International--.</p> <p>Basel Convention (Hazardous Waste): Not applicable.</p> <p>Chemical Weapons Convention (OPCW): This product does not contain reportable substances at &gt;0,0001% concentration.</p> <p>Kyoto Protocol Greenhouse Gases: This product does not contain reportable substances at &gt;0,0001% concentration.</p> <p>Mercosur Agreement: Not applicable.</p> <p>Montreal Protocol: This product does not contain reportable substances at &gt;0,0001% concentration.</p> <p>The Rotterdam Convention: This product does not contain reportable substances at &gt;0,0001% concentration.</p> <p>The Stockholm Convention: This product does not contain reportable substances at &gt;0,0001% concentration.</p> <p>--Asia and the ASEAN Nations--.</p> <p>Catalog of Hazardous Chemicals (China): This product does not contain reportable substances at &gt;0,0001% concentration.</p> <p>Regulation of Minister of Trade of the Republic of Indonesia, Number 75, Year 2014, regarding The Second Amendment of Minister of Trade, Number 44, Year 2009, Regarding Provision, Distribution, and Control of Hazardous Substances: This product does not contain reportable substances at &gt;0,0001% concentration.</p> <p>Air Pollution Control Law (Japan): This product does not contain reportable substances at &gt;0,0001% concentration.</p> <p>Chemical Substances Control Law (Japan): This product does not contain reportable substances at &gt;0,0001% concentration.</p> <p>Industrial Safety and Health Act, Dangerous Substances (Japan): This material contains no reportable components.</p> <p>Poisonous and Deleterious Substances Act (Japan): This product does not contain reportable substances at &gt;0,0001% concentration.</p> <p>Soil Contamination Countermeasures Act (Japan): This product does not contain reportable substances at &gt;0,0001% concentration.</p> <p>Water Pollution Control Law (Japan): This product does not contain reportable substances at</p>



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

>0,0001% concentration.  
Chemical Substances Subject to Permission (Korea): This product does not contain reportable substances at >0,0001% concentration.  
Restricted or Prohibited Substances (Korea): This product does not contain reportable substances at >0,0001% concentration.  
Use and Standards of Exposure of Chemicals Hazardous to Health (USECHH), Regulation 2000 (Malaysia): This product does not contain reportable substances at >0,0001% concentration.  
Philippine Inventory of Chemicals and Chemical Substances (PICCS): All ingredients listed or exempt.  
Taiwan Toxic and Concerned Chemical Substances Control Act (TCCSCA): This product does not contain reportable substances at >0,0001% concentration.  
Hazardous Substances Act (Thailand): This product does not contain reportable substances at >0,0001% concentration.  
Law on Chemicals (Vietnam): This product does not contain reportable substances at >0,0001% concentration.

--Australia and New Zealand--.  
Australian Dangerous Goods Code: Not applicable.  
Australian Inventory of Chemical Substances (AICS): All ingredients listed or exempt.  
New Zealand Inventory of Chemicals (NZIoC): All ingredients listed or exempt.

--European Union (EU) and the United Kingdom (UK)--.  
Authorisation List (Annex XIV of REACH): This product does not contain reportable substances at >0,0001% concentration.  
Annex XVII for REACH: This product does not contain reportable substances at >0,0001% concentration.  
Article 95 of the Biocidal Products Regulation (BPR): Not applicable.

--North America--.  
Domestic/Non-Domestic Substances Lists (DSL/NDSL): All ingredients listed or exempt.  
Toxic Substances Control Act (TSCA): All ingredients listed or exempt.  
Massachusetts Right-to-Know Hazardous Substance List: Sodium phosphate dibasic.  
New Jersey Worker and Community Right to Know Act: Sodium phosphate dibasic.  
Pennsylvania Right to Know Law: Phosphoric acid, disodium salt.  
Rhode Island Right-to-Know General Law: This product does not contain reportable substances at >0,0001% concentration.

**\*\*California residents please note\*\*.**  
WARNING: This product can expose you to chemicals, including Nalidixic acid, CAS No. 389-08-2, which is/are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## SECTION 16: Other information

### Other information

#### Revision

This document differs from the previous version in the following areas:.

- 1 - Description.
- 1 - Product Use.
- 1 - Manufactured By:.
- 2 - Other hazards.
- 3 - Description.
- 9 - 9.1. Information on basic physical and chemical properties (Odour).
- 9 - 9.2. Other information (Benzene Content).

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## Other information

<p><b>Acronyms</b></p>	<p>9 - 9.2. Other information (Lead content). 11 - Acute toxicity. 12 - 12.1. Toxicity. 12 - 12.6. Other adverse effects. 15 - Chemical Inventories/Right-to-Know Lists:</p> <hr/> <p>ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by Rail (RID) and by Road (ADR). CAS No.: Chemical Abstracts Service. CLASS: Classification, Labelling, and Safety Data Sheet of Hazardous Chemicals Regulation 2013 (Malaysia). FIFRA: U.S. Federal Insecticide, Fungicide, and Rodenticide Act. GHS: Globally Harmonized System. HCS 2012: U.S. Hazard Communication Standard (2012 revision). IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation. IMDG: International Maritime Dangerous Goods. LD: Lethal dose. OEL: Occupational exposure limit. OSHA: U.S. Occupational Safety and Health Administration. PEL: Permissible Exposure Limit. REACH: Registration, Evaluation, Authorisation, and Restriction of Chemicals. SVHC: Substance of very high concern. US DOT: United States Department of Transportation. VOC: Volatile Organic Compound. WEL: Workplace Exposure Limit.</p>
<p><b>Text of Hazard Statements in Section 3</b></p>	<p>Acute Tox. 4: H302 - Harmful if swallowed. Skin Irrit. 2: H315 - Causes skin irritation. Eye Irrit. 2: H319 - Causes serious eye irritation. STOT SE 3: H335 - May cause respiratory irritation. Aquatic Acute 3: H402 - Harmful to aquatic life.</p>

## Further information

	<p>DISCLAIMER: The information and recommendations set forth herein ("Information") are presented in good faith and believed to be correct as of the date issued. No representation is made regarding the completeness or accuracy of the Information. Further, because of the many factors that affect the use of this product, the Information is supplied upon the condition that the person(s) receiving it will make their own determination regarding its suitability for their own unique purpose(s), prior to use.</p> <p>Except as expressly stated herein, NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COURSE OF PERFORMANCE, USAGE OF TRADE, OR RESULTS TO BE OBTAINED BY USE OF THIS PRODUCT are made with respect to this product or use of this product. The product covered is furnished "as is" and only subject to the warranties herein provided, no liability is assumed resulting from the use of this product.</p>
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