

Date Prepared: 07/11/2013

Reviewed On: 07/11/2013

1 Identification

- **Product Identifier**
- **Product Name:** Fraser Broth Base
- **Catalog Number:** 211766
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation** *In-vitro Diagnostics*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
BD Diagnostic Systems
7 Loveton Circle
Sparks, MD 21152
Telephone: (410) 771 - 0100 or (800) 638 - 8663
Email Address: Technical_Services@bd.com
- **Information Department:** Technical Service
- **Emergency telephone number:**
In case of a chemical emergency, spill, fire, exposure, or accident, contact BD Diagnostic Systems (410) 771-0100 or (800)-638-8663, or ChemTrec at (800) 424-9300.

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Repr. 1A H360 May damage fertility or the unborn child.



GHS07

STOT SE 3 H335 May cause respiratory irritation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



T; Toxic

R61: May cause harm to the unborn child.



Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

- **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

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· Hazard pictograms

GHS07 GHS08

· Signal word Danger**· Hazard-determining components of labeling:**

lithium chloride

· Hazard statements

H360 May damage fertility or the unborn child.

H335 May cause respiratory irritation.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P281 Use personal protective equipment as required.

P271 Use only outdoors or in a well-ventilated area.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· NFPA ratings (scale 0-4)

Health = 3

Flammability = 0

Reactivity = 0

· HMIS ratings (scale 0-4)

Health = 3

FIRE 0 Flammability = 0

REACTIVITY 0 Reactivity = 0

· Other hazards**· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.**3 Composition/information on ingredients****· Chemical characterization: Mixture****· Description:** Mixture consisting of the following components.

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· Dangerous Components:

CAS: 7647-14-5 EINECS: 231-598-3	sodium chloride		36.4%
CAS: 7558-79-4 EINECS: 231-448-7	sodium phosphate, dibasic	Xi R37	13.5%
CAS: 7447-41-8 EINECS: 231-212-3	lithium chloride	T R61; Xn R22; Xi R36/38	5.5%

· Additional information Risk phrases refer to section 15.

4 First-aid measures

- **Description of first aid measures**
- **General information** Immediately remove contaminated clothing.
- **After inhalation**
In case of unconsciousness place patient on side position for transportation.
Supply fresh air or oxygen; and immediately call for a doctor.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact**
Rinse opened eye for 15 minutes under running water. Then consult a doctor.
- **After swallowing** Call a doctor immediately.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**
CO₂, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**
During heating or in case of fire toxic gases may be produced.
- **Advice for firefighters**
- **Protective equipment:** Use respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Use respiratory protective device.
- **Environmental precautions:** Wipe up with damp sponge or mop.
- **Methods and material for containment and cleaning up:** Ensure adequate ventilation.

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· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage**· Handling****· Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.**· Information about protection against explosions and fires:**

No special measures required.

· Conditions for safe storage, including any incompatibilities**· Storage****· Requirements to be met by storerooms and receptacles:** < 30 °C**· Information about storage in one common storage facility:**

Do not store together with oxidizing and acidic materials.

· Further information about storage conditions:

Store in cool, dry conditions in well sealed containers.

· Specific end use(s) No further relevant information available.**8 Exposure controls/personal protection****· Additional information about design of technical systems:**

No further data; see Section 7.

· Control parameters**· Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· Additional information: The lists that were valid during the creation were used as basis.**· Exposure controls****· Personal Protective Equipment****· General protective and hygienic measures**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respirator.

· Protection of hands:

Chemical resistant gloves (i.e. nitrile, or equivalent).

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- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing (lab coat).

9 Physical and chemical properties· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

· Form:	Powder
· Color:	Beige
· Odor:	Characteristic

· **pH-value:** 7.2 +/- 0.2· **Change in condition**· **Melting point/Melting range:** Not determined· **Boiling point/Boiling range:** Not determined· **Flash point:** Not applicable· **Auto igniting:** Product is not self igniting.· **Danger of explosion:** Product does not present an explosion hazard.· **Density:** Not determined· **Solubility in / Miscibility with**· **Water:** Soluble· **Solvent content:**· **Solids content:** 100.0 %· **Other information** No further relevant information available.**10 Stability and reactivity**· **Reactivity**· **Chemical stability**· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **Possibility of hazardous reactions** No dangerous reactions known· **Conditions to avoid** No further relevant information available.· **Incompatible materials:** Incompatible materials: strong acids and oxidizers.· **Hazardous decomposition products:**Carbon dioxide (CO₂)

Hydrogen chloride (HCl)

Sulfur oxides (SO_x)Phosphorus oxides (PO_x)

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Lithium oxide (LiOx)

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11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

7447-41-8 lithium chloride

Oral	LD50	422 mg/kg (brd)
		526 mg/kg (rat)

7647-14-5 sodium chloride

Oral	LD50	3000 mg/kg (rat)
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7558-79-4 sodium phosphate, dibasic

Oral	LD50	17000 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:**
 Target organs: central nervous system, kidneys, and blood.
 Target organs: reproductive disorders, and tumor formation.
 Target organs: eyes, face, muscles, and urogenital system.
- **Additional toxicological information:**
 The product shows the following dangers according to internally approved calculation methods for preparations:
 Product is suspected to cause birth defects.
 Irritant
 Product is suspected to cause damage to fertility.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

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- **Ecotoxicological effects:**
- **Other information:**
The ecological effects have not been thoroughly investigated, but currently none have been identified.
- **Additional ecological information:**
- **General notes:** *Water hazard class 1 (Self-assessment): slightly hazardous for water.*
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*
- **Other adverse effects** *No further relevant information available.*

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
*Must not be disposed of with solid waste.
 Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements.
 This product is not considered a RCRA hazardous waste.*
- **Uncleaned packagings:**
- **Recommendation:** *Disposal must be made according to state and federal regulations.*
- **Recommended cleansing agent:** *Water, if necessary with cleansing agents.*

14 Transport information

- | | |
|--|-----------------|
| · UN-Number | |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · UN proper shipping name | |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) | |
| · DOT, ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · Packing group | |
| · DOT, ADR, IMDG, IATA | Void |
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |

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 · **UN "Model Regulation":** -

15 Regulatory information

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

 · **SARA Section 355 (extremely hazardous substances)**

None of the ingredients is listed.

 · **SARA Section 313 (specific toxic chemical listings)**

None of the ingredients is listed.

 · **TSCA (Toxic Substances Control Act)**

7647-14-5 sodium chloride

7558-79-4 sodium phosphate, dibasic

8013-01-2 yeast extract

7447-41-8 lithium chloride

9002-18-0 agar

7778-77-0 potassium phosphate, monobasic

531-75-9 esculin

 · **California Proposition 65 - Chemicals known to cause cancer**

389-08-2 nalidixic acid

 · **California Proposition 65 - Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

 · **California Proposition 65 - Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

 · **California Proposition 65 - Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

 · **Carcinogenic categories**

 · **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

 · **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

 · **Hazard pictograms**


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- **Signal word** *Danger*
- **Hazard-determining components of labeling:**
lithium chloride
- **Hazard statements**
H360 May damage fertility or the unborn child.
H335 May cause respiratory irritation.
- **Precautionary statements**
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P281 Use personal protective equipment as required.
P271 Use only outdoors or in a well-ventilated area.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

16 Other information

To the best of our knowledge, the information contained herein is accurate. However, neither Becton, Dickinson and Company or any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we can not guarantee that these are the only hazards that exist.

- **Department issuing MSDS:**
Environmental, Health & Safety
Created by Michael J. Spinazzola
- **Contact:** *Technical Service Representative*
- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent