

Date Prepared: 03/03/2011

Reviewed On: 02/11/2011

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

- **Product Identifier**
- **Product Name:** Fraser Broth Base
- **Catalog Number:** 211767
- **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
- **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 Composition/information on ingredients

- **Chemical characterization:** Mixture
- **Description:** Mixture consisting of the following components.

· **Dangerous Components:**

7647-14-5	sodium chloride	36.4%
7447-41-8	lithium chloride	5.5%
7558-79-4	sodium phosphate, dibasic	13.5%

3 Hazards identification

- **Classification of the substance or mixture**
- **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**

· **Labelling according to EU guidelines:**

This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR), and the MSDS contains all of the information required by the CPR.

· **Code letter and hazard designation of product:**

T Toxic

· **Hazard-determining components of labelling:**

 sodium chloride
 lithium chloride
 sodium phosphate, dibasic

· **Risk phrases:**

61 May cause harm to the unborn child

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36/37/38 Irritating to eyes, respiratory system and skin.

· Safety phrases:

- 7 Keep container tightly closed.
- 22 Do not breathe dust.
- 24/25 Avoid contact with skin and eyes.
- 36 Wear suitable protective clothing.
- 60 This material and its container must be disposed of as hazardous waste.

· Classification system
· NFPA ratings (scale 0-4)


Health = 3
Fire = 0
Reactivity = 0

· HMIS ratings (scale 0-4)


Health = 3
Fire = 0
Reactivity = 0

4 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.

5 Firefighting measures

- **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.
- **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.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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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.
- **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.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see Section 7.
- **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.
- **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).

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

9 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

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· 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 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Hazardous decomposition products:**
 - Carbon dioxide (CO₂)
 - Hydrogen chloride (HCl)
 - Sulfur oxides (SO_x)
 - Phosphorus oxides (PO_x)
 - Lithium oxide (LiO_x)

11 Toxicological information

- **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.
- **Additional toxicological information:**
 - Product is suspected to cause birth defects.
 - The product shows the following dangers according to internally approved calculation methods for preparations: Irritant
 - Product is suspected to cause damage to fertility.

12 Ecological information

- **Acquatic toxicity:** 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.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed of with solid waste.
Must adhere to official regulations.
- **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

- **DOT regulations:**
- **Hazard class:** -
- **TDG (Transport dangerous goods):**
- **TDG class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

15 Regulatory information

- **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

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**Material Safety Data Sheet**
acc. to ISO/DIS 11014

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· **Carcinogenic categories**· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

· **Canadian Substance Listing**· **Canadian Domestic Substance List (DSL)**

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

389-08-2 nalidixic acid

· **Canadian Ingredient Disclosure List (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure List (limit 1%)**

None of the ingredients is listed.

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

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