

1 Identification of substance:

- **Product name:** Marine Broth 2216
- **Catalog number:** 279110
- **Manufacturer/Supplier:**
BD Diagnostic Systems
7 Loveton Circle
Sparks, MD 21152
Tel: (410) 771-0100 or (800) 638-8663
- **Information department:** Technical Services
- **Emergency information:**
In case of a chemical emergency, spill, fire, exposure, or accident contact BD Diagnostic Systems at (410)771-0100 or (800)638-8663, or ChemTrec at (800)424-9300.

2 Composition/Data on components:

- **Chemical characterization:**
- **CAS No. Description:**
Not applicable
- **Chemical characterization**
- **Description:** Mixture consisting of the following components.

· **Dangerous components:**

7786-30-3	Magnesium Chloride	7.4%
7487-88-9	magnesium sulfate	7.2%
7647-14-5	sodium chloride	61.66%

3 Hazards identification

· **Hazard description:**



Xi Irritant

- **Information pertaining to particular dangers for man and environment**
R 36/37/38 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.
- **NFPA ratings (scale 0-4)**



Health = 1
Fire = 0
Reactivity = 0

4 First aid measures

- **General information** No special measures required.
- **After inhalation** Supply fresh air; consult doctor in case of complaints.

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- **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** If symptoms persist consult doctor.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards caused by the material, its products of combustion or resulting gases:**
During heating or in case of fire toxic gases may be produced.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Wipe up with damp sponge or mop.
- **Measures for cleaning/collecting:** No special measures required.
- **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Handling**
- **Information for safe handling:** No special measures required.
- **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:** Store away from oxidizing agents.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed containers.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 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**
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:**
In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respirator.

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· 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

Form:	Solid. Powder
Color:	Light beige
Odor:	Characteristic

· Change in condition	Undetermined
· Melting point/Melting range:	Not determined
· Boiling point/Boiling range:	Not determined

· Flash point: Not applicable

· Flammability (solid, gaseous) Product is not flammable.

· Danger of explosion: Product does not present an explosion hazard.

· Density: Not determined

· Solubility in / Miscibility with
Water: Partly soluble

· pH-value: 7.6 +/- 0.2

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- Materials to be avoided:** Incompatible material: strong oxidizers.
- Dangerous reactions** No dangerous reactions known
- Dangerous products of decomposition:**
Carbon dioxide (CO₂)
Hydrogen chloride (HCl)
Sulfur oxides (SO_x)

11 Toxicological information

- Acute toxicity:**
- Primary irritant effect:**
- on the skin:** Irritant to skin and mucous membranes.
- on the eye:** Irritating effect.

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- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:** Target organs: kidneys, and central nervous system
- **Additional toxicological information:**
Irritant
The product shows the following dangers according to internally approved calculation methods for preparations:

12 Ecological information:

- **Ecotoxicological effects:**
- **Other information:**
The ecological effects have not been thoroughly investigated, but currently none have been identified.
- **General notes:** Generally not hazardous for water.

13 Disposal considerations

- **Product:**
- **Recommendation**
Smaller quantities can 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.

14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

15 Regulations

- **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.

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· TSCA (Toxic Substances Control Act)

7786-30-3	Magnesium Chloride
7487-88-9	magnesium sulfate
10043-52-4	calcium chloride
8013-01-2	yeast extract
7447-40-7	potassium chloride
	sodium bicarbonate
1185-57-5	ferric ammonium citrate
7758-02-3	potassium bromide
	ammonium phosphate, dibasic
10043-35-3	boric acid
	sodium nitrate
6834-92-0	disodium metasilicate
7681-49-4	sodium fluoride

· California Proposition 65 - Chemicals known to cause cancer

None of the ingredients is listed.

· 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.

· Carcinogenicity categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· Product related hazard information:

The product has been classified and marked in accordance with regulations on hazardous materials.

· Hazard symbols:

Xi Irritant

· Hazard-determining components of labeling:

Magnesium Chloride
magnesium sulfate

· Risk phrases:

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

· Safety phrases:

7 Keep container tightly closed.
22 Do not breathe dust.

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Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 12/09/2003

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- 25 Avoid contact with eyes.
- 36 Wear suitable protective clothing.

16 Other information:

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- **Department issuing MSDS:** Safety and Environment Department
- **Contact:** Technical Service Representative

USA