

Date Prepared: 10/15/2008

Reviewed On: 12/21/2007

1 Identification of substance:

- **Product name:** BD GasPak™ EZ CO2 Pouch System
- **Catalog number:** 260684
- **Manufacturer/Supplier:**
BD Diagnostic Systems
7 Loveton Circle
Sparks, MD 21152
Telephone: (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 (410) 771-0100 or (800)-638-8663, or ChemTrec at (800) 424-9300.

2 Composition/Data on components:

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

· **Dangerous components:**

7440-44-0	charcoal
-----------	----------

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

· **HMIS ratings (scale 0-4)**



HEALTH 1 Health = 1
FIRE 0 Fire = 0
REACTIVITY 0 Reactivity = 0

4 First aid measures

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

(Contd. on page 2)

Date Prepared: 10/15/2008

Reviewed On: 12/21/2007

Product name: BD GasPak™ EZ CO2 Pouch System

(Contd. of page 1)

· **Information for doctor** Show this product label or this MSDS.

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.
- **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:**
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**
- **Information for safe handling:** Store in cool, dry place in tightly closed containers.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **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:**

7440-44-0 charcoal

EL (Canada (English))	2 mg/m ³ respirable
PEL (USA)	Short-term value: 2.5 mg/m ³ OSHA PEL (natural graphite)
TLV (USA)	Short-term value: 2 mg/m ³ ACGIH TLV (respirable dust)

- **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.

(Contd. on page 3)

Date Prepared: 10/15/2008

Reviewed On: 12/21/2007

Product name: BD GasPak™ EZ CO2 Pouch System

(Contd. of page 2)

· 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

Form:	<i>Solid.</i>
	<i>Granules</i>
Color:	<i>Black</i>
	<i>Dark gray</i>
Odor:	<i>Characteristic</i>

· Change in condition
Melting point/Melting range: Not determined
Boiling point/Boiling range: Not determined
· Flash point: *Not applicable*
· Ignition temperature: *>250°C*
· 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: *Partly soluble*
· Solvent content:
Organic solvents: *0.0 %*
· Solids content: *100.0 %*
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: *No dangerous decomposition products known.*

CDN

(Contd. on page 4)



Material Safety Data Sheet

acc. to ISO/DIS 11014

Date Prepared: 10/15/2008

Reviewed On: 12/21/2007

Product name: BD GasPak™ EZ CO2 Pouch System

(Contd. of page 3)

11 Toxicological information

- **Acute toxicity:**

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

7440-44-0 charcoal

Oral LD50 24000 mg/kg (rat)

- **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:**

The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

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**

Must not be disposed of with solid waste.

Do not accumulate a large quantity of GasPak oxygen absorbing sachets in one place. Large quantity of unused sachets, when exposed to oxygen and temperatures of 140 F (60 C) may generate sufficient heat to ignite nearby combustible materials

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

(Contd. on page 5)

CDN

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

Date Prepared: 10/15/2008

Reviewed On: 12/21/2007

Product name: BD GasPak™ EZ CO2 Pouch System

(Contd. of page 4)

- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

- **Transport/Additional information:**

If a dashed line appears in the Hazard Class section for the type of transportation, this indicates the product is not regulated for transportation.

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.

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

7440-44-0	charcoal
-----------	----------

134-03-2	sodium ascorbate
----------	------------------

- **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.

- **Canadian Substance Listing**

- **Canadian Domestic Substance List (DSL)**

7440-44-0	charcoal
-----------	----------

134-03-2	sodium ascorbate
----------	------------------

- **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.

- **Product related hazard information:**

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.

- **Hazard symbols:**

Xi Irritant

- **Hazard-determining components of labeling:**

charcoal

- **Risk phrases:**

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

- **Safety phrases:**

7 Keep container tightly closed.

(Contd. on page 6)

CDN



Material Safety Data Sheet
acc. to ISO/DIS 11014

Date Prepared: 10/15/2008

Reviewed On: 12/21/2007

Product name: BD GasPak™ EZ CO2 Pouch System

36 Wear suitable protective clothing.

(Contd. of page 5)

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:**
Safety and Environment Department
MSDS created by Michael J. Spinazzola
- **Contact:** Technical Service Representative

CDN