



Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 12/18/2003

1 Identification of substance:

- **Product name:** Sodium Borohydride Tablet
(GasPak Plus Bulk Kit)
- **Catalog number:** 271040
- **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
- **Identification number(s):**
- **EINECS Number:** 2410044
- **Chemical characterization**
- **Description:** *Mixture of the substances listed below with nonhazardous additions.momomomo*



Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 12/18/2003

Product name: Sodium Borohydride Tablet
(GasPak Plus Bulk Kit)

The substance demonstrates unusual reactivity with water.

(Contd. of page 1)

4 First aid measures

· **General information**

Symptoms of poisoning may even occur after several hours; therefore provide medical observation for at least 48 hours after the accident.

· **After inhalation** *Seek medical treatment in case of complaints.*

· **After skin contact** *Immediately wash with water and soap and rinse thoroughly.*

· **After eye contact**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing** *Immediately call a doctor.*

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

· **Danger**

Danger of gastric perforation.

Danger of impaired breathing.

5 Fire fighting measures

· **Suitable extinguishing agents** *CO₂, sand, extinguishing powder. Do not use water.*

· **For safety reasons unsuitable extinguishing agents** *Water.*

· **Special hazards caused by the material, its products of combustion or resulting gases:**

Rinse opened eye for several minutes under running water. Rinse opened eye for several minutes under running water.



Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 12/18/2003

Product name: Sodium Borohydride Tablet
(GasPak Plus Bulk Kit)

(Contd. of page 2)

· **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**
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

Form: Solid.
Color: Whitish
Odor: Characteristic

· Change in condition

Melting point/Melting range: Not determined
Boiling point/Boiling range: Not determined

· **Flash point:** Not applicable

· **Flammability (solid, gaseous)** Contact with water liberates extremely flammable gases.

· **Auto igniting:** Product is not self igniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Density:** Not determined

(Contd. on page 4)

USA



Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 12/18/2003

Product name: Sodium Borohydride Tablet
(GasPak Plus Bulk Kit)

(Contd. of page 3)

· Solubility in / Miscibility with



Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 12/18/2003

Product name: Sodium Borohydride Tablet
(GasPak Plus Bulk Kit)

(Contd. of page 4)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to state and federal regulations.

14 Transport information

- **DOT regulations:**



- **Hazard class:** 4.3
- **Identification number:** UN2813
- **Packing group:** II
- **Proper shipping name:** WATER-REACTIVE SOLID, N.O.S. (SODIUM BOROHYDRIDE, MIXTURE)
- **Label:** 4.3

- **Remarks:** An approval has been granted by the United States Department of Transportation, Approval # CA-9904015. This package conforms to the conditions and limitations specified in the 49 CFR 173.4. The Hazard class, Identification Number, and Packing group listed above is for informational purposes only.
This approval is for shipments within the United States, and from the United States to one destination within North America. The exception is not approved for secondary shipments that originate outside the United States.

- **Land transport ADR/RID (cross-border)**

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

Printing date 01/11/2006

Reviewed on 12/18/2003

Product name: Sodium Borohydride Tablet
(GasPak Plus Bulk Kit)

(Contd. of page 5)

· **Remarks:** Limited quantity

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 4.3
- **UN/ID Number:** 2813
- **Label** 4.3
- **Packaging group:** II
- **Proper shipping name:** WATER-REACTIVE SOLID, N.O.S. (SODIUM BOROHYDRIDE, MIXTURE)
- **Remarks:** This product can be transported using the exception: Dangerous Goods in Excepted Quantities. The Hazard class, Identification number, and Packing



Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 12/18/2003

Product name: Sodium Borohydride Tablet
(GasPak Plus Bulk Kit)

(Contd. of page 6)

· **Hazard symbols:**

Xn Harmful

F Highly flammable

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

sodium borohydride

· **Risk phrases:**

15 Contact with water liberates extremely flammable gases.

22 Harmful if swallowed.

36/38 Irritating to eyes and skin.

· **Safety phrases:**

7/8 Keep container tightly closed and dry.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36 Wear suitable protective clothing.

60 This material and its container must be disposed of as hazardous waste.

· **National regulations**

· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

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 pre



Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 09/26/2003

1 Identification of substance:

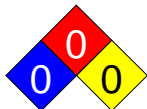
- **Product name:** Sodium Bicarbonate Plus Citric Acid Table
(GasPak Plus Bulk Kit)
- **Catalog number:** 271040
- **Manufacturer/Supplier:**
BD Diagnostic Systems
7 Loveton Circle
Sparks, MD 21152
Tel: (410) 771-0100 or (800) 638-8663
- **Information department:** Technical Services
- **Emergency information:**
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

3 Hazards identification

- **Hazard description:**
This product contains no hazardous constituents, or the concentration of all chemical constituents are below the regulatory threshold limits described by Occupational Safety Health Administration Hazard Communication Standard 29 CFR 1910.1200 and the European Directive 91/155/EEC, and 93/112/EC.
- **NFPA ratings (scale 0-4)**



Health = 0
Fire = 0
Reactivity = 0

4 First aid measures

- **General information** No special measures required.
- **After inhalation** Seek medical treatment in case of complaints.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing** If symptoms persist consult doctor.
- **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.

(Contd. on page 2)

USA





Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 09/26/2003

Product name: Sodium Bicarbonate Plus Citric Acid Table
(GasPak Plus Bulk Kit)

(Contd. of page 2)



Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 09/26/2003

Product name: Sodium Bicarbonate Plus Citric Acid Table
(GasPak Plus Bulk Kit)

(Contd. of page 3)

- **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:** -
- **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:** -

· **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. However, if a Hazard Class Number is listed the product is regulated.

15 Regulations

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

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

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



Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 09/26/2003

**Product name: Sodium Bicarbonate Plus Citric Acid Table
(GasPak Plus Bulk Kit)**

(Contd. of page 4)

· **NTP (National Toxicology Program)**

Substance is not listed.

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

Substance is not listed.

· **Product related hazard information:**

Observe the general safety regulations when handling chemicals

The substance is not subject to classification according to the sources of literature known to us.

The product is not subject to identification regulations pertaining to regulations on hazardous materials.

· **National regulations**

· **Water hazard class:** Generally not hazardous for water.

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 cannot guarantee that these are the only hazards that exist.

· **Department issuing MSDS:** Safety and Environment Department

· **Contact:** Technical Service Representative

USA



Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 09/26/2003

1 Identification of substance:

· **Product name:** *Palladium Catalyst Sachet*
(GasPak Plus Bulk Kit)

· **Catalog number:** 271040

· **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.

ation:



Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 09/26/2003

Product name: Palladium Catalyst Sachet
(GasPak Plus Bulk Kit)

(Contd. of page 1)

· **After swallowing** Immediately call a 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.
- **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:** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**
Keep respiratory protective device available.
- **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:** None.

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:**

7646-79-9 cobalt dichloride

PEL	0.1* mg/m ³ *For metal dust & fume, as Co
REL	0.05* mg/m ³ *For metal dust & fume, as Co
TLV	0.02, A3 mg/m ³ as Co

- **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.

(Contd. on page 3)



Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 09/26/2003

Product name: Palladium Catalyst Sachet
(GasPak Plus Bulk Kit)

(Contd. of page 2)

*Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.*

· **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>
Color:	<i>According to product specification</i>
Odor:	<i>Characteristic</i>

· **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*

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **Dangerous products of decomposition:** *No dangerous decomposition products known.*



Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 09/26/2003

Product name: Palladium Catalyst Sachet
(GasPak Plus Bulk Kit)

(Contd. of page 3)



Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 09/26/2003

Product name: Palladium Catalyst Sachet
(GasPak Plus Bulk Kit)

(Contd. of page 4)



Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 01/11/2006

Reviewed on 09/26/2003

Product name: Palladium Catalyst Sachet
(GasPak Plus Bulk Kit)

(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 cannot guarantee that these are the only hazards that exist.

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

USA