



# Safety Data Sheet acc. to OSHA HCS

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Date Prepared: 04/27/2015

Reviewed On: 05/19/2015

## 1 Identification

- **Product Identifier:**
- **Product Name:** BD E-Z Scrub™ **Scrub Brush 4% CHG.**
- **Catalog Number:** 371073.
- **Relevant identified uses of the substance or mixture and uses advised against:**
- **Sector of Use:** SU0 Other.
- **Application of the substance / the mixture:** Skin Antiseptic.
- **Details of the supplier of the safety data sheet:**
- **Manufacturer/Supplier:**  
Becton Dickinson (BD)  
9450 South State Street  
Sandy, UT 84070
- **Information Department:** Customer Service.
- **Emergency telephone number:**  
1-801-565-2300 (US 24 hour) +001-801-565-2300 (International 24 hour).  
In case of a chemical emergency, spill, fire, exposure, or accident contact Chemtrec:  
1-800-424-9300 (US) or +001-703-527-3887 (International).

## 2 Hazard(s) identification

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



GHS08 Health hazard.

Carc. 2

H351 Suspected of causing cancer.



GHS09 Environment.

Aquatic Acute 1 H400 Very toxic to aquatic life.

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

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, the Canada's Workplace Hazardous Materials Information System (WHMIS) and the European Directive 67/548/EEC and 1999/45/EC.

- **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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**Product Name: BD E-Z Scrub™ Scrub Brush 4% CHG.**

**Hazard pictograms:**

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GHS08 GHS09

**Signal word: Warning.**

**Hazard-determining components of labeling:**

Chlorhexidine gluconate.

2,2'-Iminodiethanol.

**Hazard statements:**

H351 Suspected of causing cancer.

H400 Very toxic to aquatic life.

**Precautionary statements:**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P273 Avoid release to the environment.

P201 Obtain special instructions before use.

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

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

P391 Collect spillage.

P405 Store locked up.

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

**Information pertaining to particular dangers for man and environment:**

CHG may cause permanent damage / deafness when instilled in the middle ear May cause permanent damage if permitted to enter and remain in the ears or eyes for a long period of time.

**NFPA ratings (scale 0-4):**

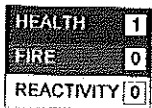


Health = 1

Flammability = 0

Reactivity = 0

**HMIS ratings (scale 0-4):**



Health = 1

Flammability = 0

Reactivity = 0

**Other hazards:**

**Results of PBT and vPvB assessment:**

**PBT:** Not applicable.

**vPvB:** Not applicable.

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Product Name: BD E-Z Scrub™ Scrub Brush 4%CHG.

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## 3 Composition/Information on ingredients

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

### • **Dangerous Components:**

CAS: 18472-51-0 EINECS: 242-354-0	Chlorhexidine gluconate.		4.0%
CAS: 111-42-2 EINECS: 203-868-0	2,2'-Iminodiethanol.	Xn R22-48/22; Xi R38	3.5%

- **Additional information:** Risk phrases refer to Section 15.

## 4 First-aid measures

- **Description of first aid measures:**
- **General information:** No special measures required.
- **After inhalation:**  
Seek medical treatment in case of complaints.  
Overexposure may cause headache, fatigue, dizziness, loss of coordination, and unconsciousness. Vapor has anesthetic properties.
- **After skin contact:**  
Immediately rinse with water.  
Seek medical treatment.
- **After eye contact:**  
Rinse opened eye for 15 minutes under running water. Then consult a doctor.
- **After swallowing:**  
Harmful if swallowed.  
Wash out mouth with water. Treat with gastric lavage using milk, egg white, or mild soap.  
Seek medical attention.
- **Information for doctor:** Show this product label or this SDS.
- **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:**  
Water.  
Foam.  
Fire-extinguishing powder.  
Carbon dioxide.
- **Special hazards arising from the substance or mixture:**  
Carbon dioxide, Carbon monoxide, Hydrogen chloride gas, Nitrogen oxides, Ammonia.

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**Product Name:** BD E-Z Scrub™ Scrub Brush 4%CHG.

- **Advice for firefighters:**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.

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## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:** See Section 8.
- **Environmental precautions:** Wipe up with damp sponge or mop.
- **Methods and material for containment and cleaning up:** No special measures required.
- **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:** No special measures required.
- **Information about protection against explosions and fires:**  
No special measures required.
- **Storage:**
- **Conditions for safe storage, including any incompatibilities:**
- **Requirements to be met by storerooms and receptacles:**  
Store at room temperature (20 - 25 °C) or (68 - 77 °F).  
Avoid excessive heat (above 40 °C or 104 °F).
- **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.
- **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.

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Product Name: BD E-Z Scrub™ Scrub Brush 4%CHG.

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- **Exposure controls:**
- **Personal Protective Equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**  
Use gloves for spill cleanup.  
Gloves are not required for normal condition of use.
- **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: Liquid.

Color: Clear.

Pink.

Red.

• **Odor:** Characteristic.

• **Odor threshold:** Not determined.

• **pH-value:** 6.0 - 7.5.

• **Change in condition:** Undetermined.

• **Melting point/Melting range:** Similar to water.

• **Boiling point/Boiling range:** Similar to water.

• **Flash point:** Not applicable.

• **Flammability (solid, gaseous):** Not applicable.

##### • Ignition temperature:

Decomposition temperature: Not determined.

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

• **Danger of explosion:** Product does not present an explosion hazard.

##### • Explosion limits:

Lower: Not determined.

Upper: Not determined.

• **Vapor pressure:** Not determined.

##### • Density:

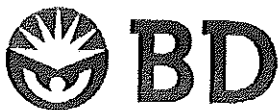
Relative density: 1.06 g/cm<sup>3</sup> (8.846 lbs/gal).

Vapour density: Not determined.

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Product Name: BD E-Z Scrub™ Scrub Brush 4% CHG.

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Evaporation rate:	Not determined.
· Solubility in / Miscibility with Water:	Soluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	50-500 CPS.
Kinematic:	Not determined.
· 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:**  
Strong oxidizers. Anionic compounds.
- **Hazardous decomposition products:**  
Carbon monoxide (CO) and Carbon dioxide (CO<sub>2</sub>).  
Nitrogen oxides (NO<sub>x</sub>).  
Ammonia (NH<sub>4</sub>).  
Hydrogen chloride (HCl) gas.

## 11 Toxicological information

- **Information on toxicological effects:**
- **Acute toxicity:**
- **Primary irritant effect:**
- **On the skin:** May cause irritation to skin and mucous membranes.
- **On the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations.  
The product is not subject to OSHA classification according to internally approved calculation methods for preparations.  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

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Product Name: BD E-Z Scrub™ Scrub Brush 4% CHG.

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· **Carcinogenic categories:**

· **IARC (International Agency for Research on Cancer):**

111-42-2	2,2'-Iminodiethanol.	2B
7647-01-0	Hydrochloric acid.	3
123-91-1	1,4-Dioxane.	2B
75-21-8	Ethylene oxide.	1

· **NTP (National Toxicology Program):**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**

75-21-8 Ethylene oxide.

## 12 Ecological information

· **Toxicity:**

· **Aquatic toxicity:**

Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment. Low toxicity to sewage microorganisms.

LC-50: Zebra danio (Danio rerio) 2.08 mg/L (96 hour).

· **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.

· **Ecotoxicological effects:**

· **Other information:**

The ecological effects have not been thoroughly investigated, but currently none have been identified.

· **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:**

Smaller quantities can be disposed of with solid waste.

This product is not considered a RCRA hazardous waste.

Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to state and federal regulations.

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Product Name: BD E-Z Scrub™ Scrub Brush 4% CHG.

· Recommended cleansing agent: Water, if necessary with cleansing agents. (Contd. of page 7)

**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:	Product contains environmentally hazardous substances: Chlorhexidine gluconate.
· Marine pollutant:	Yes.
· Special precautions for user:	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Not applicable.

**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):	111-42-2 2,2'-Iminodiethanol.
· TSCA (Toxic Substances Control Act):	All ingredients are listed.
· California Proposition 65 - Chemicals known to cause cancer:	111-42-2 2,2'-Iminodiethanol.

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**Product Name: BD E-Z Scrub™ Scrub Brush 4% CHG.**

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123-91-1 1,4-Dioxane.

75-21-8 Ethylene oxide.

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

75-21-8 Ethylene oxide.

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

75-21-8 Ethylene oxide.

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

75-21-8 Ethylene oxide.

· **Carcinogenic categories:**

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

111-42-2 2,2'-Iminodiethanol.

A3

7647-01-0 Hydrochloric acid.

A4

123-91-1 1,4-Dioxane.

A3

75-21-8 Ethylene oxide.

A2

· **GHS label elements:**

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

· **Hazard pictograms:**



GHS08 GHS09

· **Signal word: Warning.**

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

Chlorhexidine gluconate.

2,2'-Iminodiethanol.

· **Hazard statements:**

H351 Suspected of causing cancer.

H400 Very toxic to aquatic life.

· **Precautionary statements:**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P273 Avoid release to the environment.

P201 Obtain special instructions before use.

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

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

P391 Collect spillage.

P405 Store locked up.

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

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**Product Name: BD E-Z Scrub™ Scrub Brush 4% CHG.**

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out. (Contd. of page 9)

**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.

· **Contact:** Technical Service Representative.

· **Date of preparation / last revision:** 04/27/2015 - 04/19/2010.

· **Abbreviations and acronyms:**

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.

EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

NFPA: National Fire Protection Association (USA).

HMIS: Hazardous Materials Identification System (USA).

Carc. 2: Carcinogenicity, Hazard Category 2.

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1.

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