

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:** TB Decolorizer
- **Catalog Number:** 212517
- **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:**

64-17-5	ethanol	92.3%
67-56-1	methanol	4.7%
7647-01-0	hydrochloric acid	3.0%

### 3 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R20/21/22-40-68/20/21/22: Harmful by inhalation, in contact with skin and if swallowed. Limited evidence of a carcinogenic effect. Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.



F; Highly flammable

R11: Highly flammable.

- **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:**

Xn Harmful

F Highly flammable

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

methanol

ethanol

(Contd. on page 2)

Date Prepared: 03/03/2011

Reviewed On: 02/11/2011

**Product Name: TB Decolorizer**

(Contd. of page 1)

**· Risk phrases:**

- 11 *Highly flammable.*
- 20/21/22 *Harmful by inhalation, in contact with skin and if swallowed.*
- 40 *Limited evidence of a carcinogenic effect.*
- 68/20/21/22 *Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.*

**· Safety phrases:**

- 7/9 *Keep container tightly closed and in a well-ventilated place.*
- 16 *Keep away from sources of ignition - No smoking.*
- 36/37 *Wear suitable protective clothing and gloves.*

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

HEALTH	1	Health = 1
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

**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** *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** *Immediately call a doctor.*
- Information for doctor** *Show this product label or this MSDS.*

**5 Firefighting measures****· Suitable extinguishing agents**

*CO<sub>2</sub>, 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**

- Personal precautions, protective equipment and emergency procedures** *Not required.*
- 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.*

(Contd. on page 3)

Date Prepared: 03/03/2011

Reviewed On: 02/11/2011

**Product Name: TB Decolorizer**

See Section 13 for disposal information.

(Contd. of page 2)

## 7 Handling and storage

- **Handling**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**
  - Keep ignition sources away - Do not smoke.
  - Protect against electrostatic charges.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** 15 - 30 °C
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
  - Keep receptacle tightly sealed.
  - 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:**

### 64-17-5 ethanol

 TLV | 1900 mg/m<sup>3</sup>, 1000 ml/m<sup>3</sup>

### 67-56-1 methanol

 TLV | Short-term value: 325 mg/m<sup>3</sup>, 250 ml/m<sup>3</sup>  
 Long-term value: 260 mg/m<sup>3</sup>, 200 ml/m<sup>3</sup>

### 7647-01-0 hydrochloric acid

 TLV | 7.4 mg/m<sup>3</sup>, 5 ml/m<sup>3</sup>

- **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.
  - Wash hands before breaks and at the end of work.
- **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:** Liquid

(Contd. on page 4)

Date Prepared: 03/03/2011

Reviewed On: 02/11/2011

**Product Name: TB Decolorizer**

(Contd. of page 3)

· <b>Color:</b>	Clear
· <b>Odor:</b>	Characteristic
· <b>pH-value:</b>	Slightly alkaline Not applicable. Not determined.
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	Not determined
<b>Boiling point/Boiling range:</b>	78°C
· <b>Flash point:</b>	15.5°C
· <b>Ignition temperature:</b>	425.0°C
· <b>Auto igniting:</b>	Product is not self igniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	3.8 Vol %
<b>Upper:</b>	13.5 Vol %
· <b>Vapor pressure at 25°C:</b>	59.0 hPa
· <b>Density at 25°C:</b>	1.53 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with Water:</b>	Soluble
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	97.0 %

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Hazardous decomposition products:**  
Carbon dioxide (CO<sub>2</sub>)  
Hydrogen chloride (HCl)

### 11 Toxicological information

- **Acute toxicity:**

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

**64-17-5 ethanol**

Oral	LD50	3450 mg/kg (MOU)
		7060 mg/kg (rat)

**67-56-1 methanol**

Oral	LD50	5628 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** May cause irritation to skin and mucous membranes.
- **on the eye:** May cause irritation
- **Sensitization:** No sensitizing effects known.

(Contd. on page 5)

Date Prepared: 03/03/2011

Reviewed On: 02/11/2011

**Product Name: TB Decolorizer**

(Contd. of page 4)

**· Additional toxicological information:**

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

**12 Ecological information**

- **Acquatic toxicity:** No further relevant information available.
- **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:** 9
- **Identification number:** UN3316
- **Packing group:** II
- **Proper shipping name:** CHEMICAL KITS
- **Label** 9

**· TDG (Transport dangerous goods):**

- **TDG class:** 9 (M11) Miscellaneous dangerous substances and articles
- **Danger code (Kemler):** 33
- **UN-Number:** 3316
- **Packaging group:** II

(Contd. on page 6)

CA

Date Prepared: 03/03/2011

Reviewed On: 02/11/2011

**Product Name: TB Decolorizer**

(Contd. of page 5)

 · **UN proper shipping name:** 1993 Flammable liquid, n.o.s. (ethanol)

 · **Maritime transport IMDG:**


· **IMDG Class:** 9  
 · **UN Number:** 3316  
 · **Label** 9  
 · **Packaging group:** II  
 · **EMS Number:** F-A,S-P  
 · **Marine pollutant:** No  
 · **Proper shipping name:** CHEMICAL KITS

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


· **ICAO/IATA Class:** 9  
 · **UN/ID Number:** 3316  
 · **Label** 9  
 · **Packaging group:** II  
 · **Proper shipping name:** CHEMICAL KITS

### 15 Regulatory information

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

7647-01-0 hydrochloric acid

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

All ingredients are listed.

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

All ingredients are listed.

 · **Carcinogenic categories**

 · **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

64-17-5 ethanol

A4

7647-01-0 hydrochloric acid

A4

 · **Canadian Substance Listing**

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

All ingredients are listed.

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

64-17-5 ethanol

(Contd. on page 7)



Date Prepared: 03/03/2011

Reviewed On: 02/11/2011

**Product Name: TB Decolorizer**

(Contd. of page 6)

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

67-56-1	methanol
7647-01-0	hydrochloric acid

**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

CA