

**1 Identification of substance:**

- **Product name:** TB Decolorizer
- **Catalog number:** 212517
- **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**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

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

**3 Hazards identification**

· **Hazard description:**



Xn Harmful  
F Highly flammable

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

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

· **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 = 3  
Reactivity = 0

**Product name: TB Decolorizer**

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**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 Fire fighting 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**

- **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 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 and personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.

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**· Components with limit values that require monitoring at the workplace:**

**64-17-5 ethanol**

PEL 1900 mg/m<sup>3</sup>, 1000 ppm  
REL 1900 mg/m<sup>3</sup>, 1000 ppm  
TLV 1880 mg/m<sup>3</sup>, 1000 ppm

**67-56-1 methanol**

PEL 260 mg/m<sup>3</sup>, 200 ppm  
REL Short-term value: 325 mg/m<sup>3</sup>, 250 ppm  
Long-term value: 260 mg/m<sup>3</sup>, 200 ppm  
Skin  
TLV Short-term value: 328 mg/m<sup>3</sup>, 250 ppm  
Long-term value: 262 mg/m<sup>3</sup>, 200 ppm  
Skin; BEI

**7647-01-0 hydrochloric acid**

PEL Short-term value: C 7 mg/m<sup>3</sup>, C 5 ppm  
REL Short-term value: C 7 mg/m<sup>3</sup>, C 5 ppm  
TLV Short-term value: C 2.98 mg/m<sup>3</sup>, C 2 ppm

**· 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**

**Form:** Liquid  
**Color:** Clear  
**Odor:** Characteristic

**· Change in condition**

**Melting point/Melting range:** Not determined  
**Boiling point/Boiling range:** 78°C (172°F)

**· Flash point:** 15.5°C (60°F)

**· Ignition temperature:** 425.0°C (797°F)

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**Product name: TB Decolorizer**

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· <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 (77°F):</b>	59.0 hPa (44 mm Hg)
· <b>Density at 25°C (77°F):</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.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:**  
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:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:** Target organs: liver, gastrointestinal tumors, blood, lymphomas.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Harmful

USA

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**12 Ecological information:**

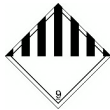
- **Ecotoxicological effects:**
- **Other information:**  
The ecological effects have not been thoroughly investigated, but currently none have been identified.
- **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

**13 Disposal considerations**

- **Product:**
- **Recommendation**  
Must not be disposed of with solid waste.  
Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements.  
RCRA hazardous waste - RCRA # D001 (ignitable).
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to state and federal regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

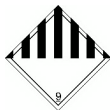
**14 Transport information**

· **DOT regulations:**



- **Hazard class:** 9
- **Identification number:** UN3316
- **Packing group:** II
- **Proper shipping name:** CHEMICAL KITS
- **Label:** 9

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



- **ADR/RID class:** 9 (M11) Miscellaneous dangerous substances and articles
- **Danger code (Kemler):** 33
- **UN-Number:** 3316
- **Packaging group:** II
- **Description of goods:** 3316 CHEMICAL KIT

· **Maritime transport IMDG:**



- **IMDG Class:** 9

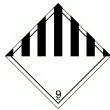
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- **UN Number:** 3316
- **Label** 9
- **Packaging group:** II
- **EMS Number:** F-A,S-P
- **Marine pollutant:** No
- **Proper shipping name:** CHEMICAL KITS

· **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 Regulations

· **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.

· **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:**

64-17-5 | ethanol

· **Carcinogenicity categories**

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

7647-01-0 | hydrochloric acid

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· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

64-17-5 | ethanol

A4

· **Product related hazard information:**

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

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**· Hazard symbols:***Xn Harmful**F Highly flammable***· Hazard-determining components of labeling:***methanol**ethanol***· 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.**60 This material and its container must be disposed of as hazardous waste.***· National regulations****· Technical instructions (air):**

Class	Share in %
III	97.0

**16 Other information:**

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