

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

(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** 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**

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 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.

(Contd. on page 3)

Product name: TB Decolorizer

(Contd. of page 2)

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

64-17-5 ethanol

PEL 1900 mg/m³, 1000 ppm
REL 1900 mg/m³, 1000 ppm
TLV 1880 mg/m³, 1000 ppm

67-56-1 methanol

PEL 260 mg/m³, 200 ppm
REL Short-term value: 325 mg/m³, 250 ppm
Long-term value: 260 mg/m³, 200 ppm
Skin
TLV Short-term value: 328 mg/m³, 250 ppm
Long-term value: 262 mg/m³, 200 ppm
Skin; BEI

7647-01-0 hydrochloric acid

PEL Short-term value: C 7 mg/m³, C 5 ppm
REL Short-term value: C 7 mg/m³, C 5 ppm
TLV Short-term value: C 2.98 mg/m³, 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)

(Contd. on page 4)

Product name: TB Decolorizer

(Contd. of page 3)

· Auto igniting:	Product is not self igniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	3.8 Vol %
Upper:	13.5 Vol %
· Vapor pressure at 25°C (77°F):	59.0 hPa (44 mm Hg)
· Density at 25°C (77°F):	1.53 g/cm ³
· Solubility in / Miscibility with Water:	Soluble
· Solvent content:	
Organic solvents:	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 (CO₂)
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

Product name: TB Decolorizer

(Contd. of page 4)

12 Ecological information:

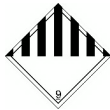
- **Ecotoxicological effects:**
- **Other information:**
The ecological effects have not been thoroughly investigated, but currently none have been identified.
- **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

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.

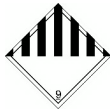
14 Transport information

· **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

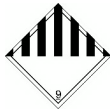
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Product name: TB Decolorizer

(Contd. of page 5)

- **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.

(Contd. on page 7)

Product name: TB Decolorizer

(Contd. of page 6)

· 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*