

Date Prepared: 10/15/2008

Reviewed On: 01/11/2008

1 Identification of substance:

- **Product name:** Methylene Blue Stain Loeffler
- **Catalog number:** 261204
- **Manufacturer/Supplier:**
BD Diagnostic Systems
7 Loveton Circle
Sparks, MD 21152
Telephone: (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 (410) 771-0100 or (800)-638-8663, or ChemTrec at (800) 424-9300.

2 Composition/Data on components:

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

- **Dangerous components:**

64-17-5	ethanol	22.0%
67-56-1	methanol	1.0%

3 Hazards identification

- **Hazard description:**



Xn Harmful

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

R 10 Flammable.

R 40 Limited evidence of a carcinogenic effect.

- **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 = 2

Reactivity = 0

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



Health = *0

Fire = 2

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.

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- **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 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:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
- **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:** Store away from oxidizing agents.
- **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:**

64-17-5 ethanol

TLV 1900 mg/m³, 1000 ml/m³

67-56-1 methanol

TLV Short-term value: 325 mg/m³, 250 ml/m³
Long-term value: 260 mg/m³, 200 ml/m³

- **Additional information:** The lists that were valid during the creation were used as basis.

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- **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: Blue
Odor: Characteristic

· Change in condition

Melting point/Melting range: Not determined
Boiling point/Boiling range: 79°C

· **Flash point:** 49°C

· **Ignition temperature:** 425.0°C

· **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: 1.5 Vol %
Upper: 7.0 Vol %

· **Density:** Not determined

· Solubility in / Miscibility with

Water: Soluble

· **pH-value at 25°C:** 9.8 +/-0.2

· Solvent content:

Organic solvents: 23.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:** Incompatible material: strong oxidizers.
- **Dangerous reactions** No dangerous reactions known

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- **Dangerous products of decomposition:**
Carbon monoxide (CO) and carbon dioxide (CO₂)
Phosphorus oxides (PO_x)

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)

- **Primary irritant effect:**
- **on the skin:** No irritating effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
Product is suspected to cause birth defects.
The product shows the following dangers according to internally approved calculation methods for preparations:

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.
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:** 3
- **Identification number:** UN1993

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- **Packing group:** III
- **Proper shipping name:** FLAMMABLE LIQUID, N.O.S. (ethanol, methanol)
- **Label** 3
- **Remarks:** This product can be transported using the "small quantity" exception. This package conforms to 49 CFR 173.4. The Hazard Class, Identification number, and Packing group listed above is for informational purposes only.

· TDG (Transport dangerous goods):



- **TDG class:** 3 (F1) Flammable liquids
- **Danger code (Kemler):** 33
- **UN-Number:** 1993
- **Packaging group:** II
- **Description of goods:** 1993 Flammable liquid, n.o.s. (ethanol, methanol (Methyl alcohol))

· Maritime transport IMDG:



- **IMDG Class:** 3
- **UN Number:** 1993
- **Label** 3
- **Packaging group:** III
- **Marine pollutant:** No
- **Proper shipping name:** FLAMMABLE LIQUID, N.O.S. (ethanol, methanol)

· Air transport ICAO-TI and IATA-DGR:



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1993
- **Label** 3
- **Packaging group:** III
- **Proper shipping name:** FLAMMABLE LIQUID, N.O.S. (ethanol, methanol)

15 Regulations

· SARA Section 355 (extremely hazardous substances)

None of the ingredients is listed.

· SARA Section 313 (specific toxic chemical listings)

64-17-5 ethanol

67-56-1 methanol

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· TSCA (Toxic Substances Control Act)

7732-18-5	water
64-17-5	ethanol
67-56-1	methanol
1310-58-3	potassium hydroxide

· Carcinogenicity categories
· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

64-17-5	ethanol	A4
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· Canadian Substance Listing
· Canadian Domestic Substance List (DSL)

7732-18-5	water
64-17-5	ethanol
67-56-1	methanol
1310-58-3	potassium hydroxide

· Canadian Ingredient Disclosure List (limit 0.1%)

64-17-5	ethanol
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· Canadian Ingredient Disclosure List (limit 1%)

67-56-1	methanol
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· Product related hazard information:

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.

· Hazard symbols:

Xn Harmful

· Hazard-determining components of labeling:

ethanol

methanol

· Risk phrases:

10 Flammable.

40 Limited evidence of a carcinogenic effect.

· Safety phrases:

7 Keep container tightly closed.

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.

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CDN

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· **National regulations**· **Technical instructions (air):**

Class	Share in %
Water	76.5
III	23.0

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:**

Safety and Environment Department

MSDS created by Michael J. Spinazzola

· **Contact:** Technical Service Representative

CDN