

Date Prepared: 03/01/2011

Reviewed On: 02/11/2011

### 1 Identification of the substance/mixture and of the company/undertaking

- **Product Identifier**
- **Product Name:** BD CytoRich™ Blue Preservative
- **Catalog Number:** 490509
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 BD Diagnostics - TriPath  
 780 Plantation Drive  
 Burlington, NC 27215  
 Telephone: (336) 290 - 8300 or 866 - TriPath (option#1)

### 2 Composition/information on ingredients

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

- **Dangerous Components:**

64-17-5	ethanol	44.0%
67-56-1	methanol	5.0%
25322-68-3	Polyethylene Glycol	1.0%

### 3 Hazards identification

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



T; Toxic

R39/23/24/25: Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.



Xn; Harmful

R20/21/22: Harmful by 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:**

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

- **Code letter and hazard designation of product:**

Xn Harmful

F Highly flammable

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

ethanol

methanol

- **Risk phrases:**

11 Highly flammable.

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20/21/22 Harmful by inhalation, in contact with skin and if swallowed.  
39/23/24/25 Toxic: danger of very serious 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.
- 23 Do not breathe gas/fumes/vapour/spray.
- 36/37 Wear suitable protective clothing and gloves.
- 45 In case of accident or if you feel unwell, seek medical advice immediately.
- 60 This material and its container must be disposed of as hazardous waste.

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

HEALTH	2	Health = *2
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

**4 First aid measures****· General information**

Immediately remove contaminated clothing.  
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. If required, provide artificial respiration. Keep patient warm. Seek medical advice.  
In case of unconsciousness place patient on side position for transportation.

**· 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**

Do not induce vomiting; immediately call for medical help.  
Drink copious amounts of water and provide fresh air. 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.

**· For safety reasons unsuitable extinguishing agents** Water with full jet.**· Special hazards arising from the substance or mixture**

During heating or in case of fire toxic gases may be produced.

**· Protective equipment:**

Wear self-contained respiratory protective device.

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Wear fully protective suit.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Wear protective clothing.

Use respiratory protective device.

- **Environmental precautions: Wipe up with damp sponge or mop.**

- **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

- **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**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- **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/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

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

- **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.  
 Avoid contact with the eyes and skin.
- **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

· <b>General Information</b>	
· <b>Appearance:</b>	
<b>Form:</b>	Liquid
<b>Color:</b>	Clear Blue
· <b>Odor:</b>	Alcohol-like
· <b>pH-value:</b>	Not applicable
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b> Not determined	
<b>Boiling point/Boiling range:</b> 82°C (180 °F)	
· <b>Flash point:</b>	15°C (59 °F)
· <b>Ignition temperature:</b>	425.0°C (797 °F)
· <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>	3.5 Vol %
<b>Upper:</b>	15.0 Vol %
· <b>Density:</b>	0.93 g/cm <sup>3</sup> (7.761 lbs/gal)
· <b>Solubility in / Miscibility with</b>	
<b>Water:</b>	Soluble
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	49.0 %
<b>Water:</b>	49.0 %

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

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- **Incompatible materials:** Incompatible material: strong oxidizers.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 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:** No irritating effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

- **Subacute to chronic toxicity:**

Target organs: thyroid, kidney, ureter or bladder tumors.

Target organ: liver

Target organs: eyes, and epidermilogical effects

- **Additional toxicological information:**

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

### 12 Ecological information

- **Acquatic toxicity:** This material is not expected to be toxic to aquatic life.
- **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.  
 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.

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**14 Transport information**

## · DOT regulations:



- **Hazard class:** 3
- **Identification number:** UN1987
- **Packing group:** II
- **Proper shipping name:** ALCOHOLS, N.O.S. (ETHANOL , METHANOL)
- **Label** 3

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



- **ADR/RID class:** 3 (F1) Flammable liquids
- **Danger code (Kemler):** 33
- **UN-Number:** 1987
- **Packaging group:** II
- **UN proper shipping name:** 1987 ALCOHOLS, N.O.S., special provision 640D (ETHANOL , METHANOL)

## · Maritime transport IMDG:



- **IMDG Class:** 3
- **UN Number:** 1987
- **Label** 3
- **Packaging group:** II
- **EMS Number:** F-E,S-D
- **Marine pollutant:** No
- **Proper shipping name:** ALCOHOLS, N.O.S. (ETHANOL , METHANOL)

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



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1987
- **Label** 3
- **Packaging group:** II
- **Proper shipping name:** ALCOHOLS, N.O.S. (ETHANOL , METHANOL)

USA

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**15 Regulatory information**

· **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

· **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

· **Carcinogenic categories**

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

64-17-5 ethanol

A4

**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

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