

Safety Data Sheet acc. to OSHA HCS

Date Prepared: 07/10/2018

Reviewed On: 07/10/2018

1 Identification

- **Product Identifier:**
- **Product Name:** *BD SurePath™ Preservative Fluid*
- **Catalog Number:** 490527
- **Application of the substance / the mixture** *Laboratory Chemicals*
- **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
Email Address: Technical_Services@bd.com*
- **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 Hazard(s) identification

- **Classification of the substance or mixture**



Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02

- **Signal word** *Warning*

- **Hazard-determining components of labeling:**

*ethanol
methanol
isopropanol*

- **Hazard statements**

H226 Flammable liquid and vapor.

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· Precautionary statements

- P210 *Keep away from heat/sparks/open flames/hot surfaces. - No smoking.*
- P233 *Keep container tightly closed.*
- P240 *Ground/bond container and receiving equipment.*
- P241 *Use explosion-proof electrical/ventilating/lighting/equipment.*
- P242 *Use only non-sparking tools.*
- P243 *Take precautionary measures against static discharge.*
- P280 *Wear protective gloves/protective clothing/eye protection/face protection.*
- P303+P361+P353 *If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*
- P370+P378 *In case of fire: Use for extinction: CO2, powder or water spray.*
- P403+P235 *Store in a well-ventilated place. Keep cool.*
- P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

· NFPA ratings (scale 0-4)



Health = 0
Flammability = 3
Reactivity = 0

· HMIS ratings (scale 0-4)



HEALTH 0 Health = 0
FIRE 3 Flammability = 3
REACTIVITY 0 Reactivity = 0

- Other hazards**
- Results of PBT and vPvB assessment**
- PBT:** Not applicable.
- vPvB:** Not applicable.

3 Composition/information on ingredients

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

· Dangerous Components:

CAS: 64-17-5	ethanol	21.7%
EINECS: 200-578-6	Flam. Liq. 2, H225	

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CAS: 67-56-1	methanol	1.2%
EINECS: 200-659-6	Flam. Liq. 2, H225; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; STOT SE 1, H370	
CAS: 67-63-0	isopropanol	1.1%
EINECS: 200-661-7	Flam. Liq. 2, H225; Eye Irrit. 2A, H319; STOT SE 3, H336	

· **Additional information** Risk phrases refer to section 15.

4 First-aid measures

- **Description of first aid measures**
- **General information** Immediately remove contaminated clothing.
- **After inhalation**
Supply fresh air and 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**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**
CO₂, 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**
No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:**
Wear fully protective suit.

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*Wear self-contained respiratory protective device.***6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures**
Use respiratory protective device.
Wear protective clothing.
- **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.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** *No special requirements.*
- **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.
- **Specific end use(s)** *No further relevant information available.*

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8 Exposure controls/personal protection

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

· **Control parameters**

· **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

67-63-0 isopropanol

PEL 980 mg/m³, 400 ppm

REL Short-term value: 1225 mg/m³, 500 ppm
Long-term value: 980 mg/m³, 400 ppm

TLV Short-term value: 984 mg/m³, 400 ppm
Long-term value: 492 mg/m³, 200 ppm
BEI

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

· **Exposure controls**

· **Personal Protective Equipment**

· **General protective and hygienic measures**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

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.

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· 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

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Liquid
Color:	Clear Colorless
· Odor:	Alcohol-like

· **pH-value:** 7.2

· Change in condition

Melting point/Melting range:	Not determined
Boiling point/Boiling range:	86 °C (186.8 °F)

· **Flash point:** 35 °C (95 °F)

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

· **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:	3.5 Vol %
Upper:	15.0 Vol %

· **Vapor pressure at 20 °C (68 °F):** 59.0 hPa (44.3 mm Hg)

· **Density:** Not determined

· Solubility in / Miscibility with

Water:	Soluble
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· Solvent content:	
Organic solvents:	24.2 %
Water:	74.7 %
· Solids content: 0.0 %	
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** Incompatible material: strong oxidizers.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **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.
- **Subacute to chronic toxicity:**
Target organs: thyroid, kidney, ureter or bladder tumors.
Target organ: liver
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:

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· **Carcinogenic categories**

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

67-63-0	isopropanol	3
50-00-0	formaldehyde	1

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

50-00-0	formaldehyde
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12 Ecological information

· **Toxicity**

- **Aquatic toxicity:** This material is not expected to be toxic to aquatic life.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

· **Ecotoxicological effects:**

· **Other information:**

The ecological effects have not been thoroughly investigated, but currently none have been identified.

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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.

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· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· **UN-Number**

· **DOT, ADN, IMDG, IATA** Void

· **UN proper shipping name**

· **DOT, ADN, IMDG, IATA** Void

· **Transport hazard class(es)**

· **DOT, ADN, IMDG, IATA**

· **Class** Void

· **Packing group**

· **DOT, IMDG, IATA** Void

· **Environmental hazards:**

· **Marine pollutant:** No

· **Special precautions for user** Not applicable.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **DOT**

· **Remarks:** 49CFR 173.150(e)(2) - States that aqueous solution of alcohol containing 24 percent or less alcohol by volume and no other hazardous material can be re-class as a combustible liquid and is not subject to the requirements.

· **IMDG**

· **Remarks:** IMDG Special Provision 144 - An aqueous solution containing not more than 24% alcohol by volume is not subject to the provisions of this code.

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- **IATA**
- **Remarks:** IATA Special Provision A58 - Aqueous solutions containing 24% or less alcohol by volume is not subject to these regulations.
- **UN "Model Regulation":** Void

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **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

67-63-0 isopropanol

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

7732-18-5 water

64-17-5 ethanol

67-56-1 methanol

67-63-0 isopropanol

7647-14-5 sodium chloride

7758-11-4 potassium phosphate, dibasic

50-00-0 formaldehyde

- **California Proposition 65 - Chemicals known to cause cancer**

The concentration of formaldehyde is less than the OSHA regulated limit

50-00-0 formaldehyde

- **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.

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· **California Proposition 65 - Chemicals known to cause developmental toxicity:**

64-17-5	ethanol
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· **Carcinogenic categories**

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

64-17-5	ethanol	A4
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67-63-0	isopropanol	A4
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· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02

· **Signal word** Warning

· **Hazard-determining components of labeling:**

ethanol

methanol

isopropanol

· **Hazard statements**

H226 Flammable liquid and vapor.

· **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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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 SDS:

Environmental, Health & Safety
Created by Michael J. Spinazzola

· Contact: Technical Service Representative**· Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 3: Acute toxicity – Category 3
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
STOT SE 1: Specific target organ toxicity (single exposure) – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3