



**Material Safety Data Sheet**  
acc. to ISO/DIS 11014

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Printing Date: 2005-Sep-27

Printing Date: Reviewed on

**Product Name:** BD Vacutainer® and Microtainer® Brand Plasma Separator Tube with Lithium Heparin

**1 Identification of substance:**

• **Product Details:**

MSDS Number: VS60308-08

Issue Date: September 27, 2005

Supersedes: VS60308-07

ECO No.: ECO36115

• **Product Name:** BD Vacutainer® and Microtainer® Brand Plasma Separator Tube with Lithium Heparin

• **Catalog Numbers:** 365958, 365985, 365987, 366595, 366672, 366698, 367366, 367368, 367793, 367794, 367960, 367961, 367962, 367963, 367964, 367965, 368056, 369793, 369794

Discontinued: 365953, 365969, 365986, 365988, 367373, 367374, 367375, 367376, 367377, 367378, 368035, 368036

• **Manufacturer/Supplier:**

BD Diagnostics, Preanalytical Systems

1 Becton Drive

Franklin Lakes, NJ, 07417-1885

• **Information Department:**

BD Diagnostics, Preanalytical Systems Technical Service, (800) 631-0174.

• **Emergency Information:**

In case of a chemical emergency, spill, fire, exposure, or accident contact ChemTrec at (800) 424-9300.

**2 Composition/Data on components:**

• **Description:**

**Chemical name:**

Gel (Proprietary Mixture)

Lithium Heparin

• **CAS No.:**

Gel: Proprietary

Lithium Heparin: 9045-22-1

• **Quantity:**

**Vacutainer®**

Gel: 0.8 – 1.9 g

Lithium Heparin: 0.2 – 1.0 mg

**Microtainer®**

Gel: 0.1 – 0.3 g

Lithium Heparin: 0.1 – 0.4 mg

• **Exposure limits:** Not Applicable

### 3 Hazards identification:

- **Hazard description:**

**EU:** This product contains no hazardous constituents, or the concentration of all chemical constituents are below the regulatory threshold limits described by European Directive 91/155/EEC, and 93/112/EC.

**US:** May cause eye and skin irritation. Lithium Heparin may cause nosebleeds and irritation of the upper respiratory tract. Repeated inhalation exposure may cause lung damage, pneumoconiosis, cyanosis, and silicosis.

- **Classification system:** The classification is according to the latest editions of the EU- list, and extended by company and literature data.

- **Health Effects:**

**Acute Exposure Effects:**

**Eyes:** May cause eye irritation.

**Skin:** May cause skin irritation.

**Inhalation:** May cause nosebleeds and irritation of the upper respiratory tract (Lithium Heparin.)

**Ingestion:** None identified.

**Repeated Exposure Effects:**

**Eyes:** None identified

**Skin:** None identified

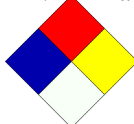
**Inhalation:** May cause lung damage, pneumoconiosis, cyanosis, and silicosis (Lithium Heparin.)

**Ingestion:** None identified

**Primary Route of Entry:** Eye contact, skin contact, inhalation, ingestion

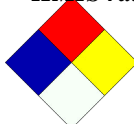
**Medical conditions which may be aggravated:** None identified.

- **NFPA ratings (scale 0-4):**



Health = 1  
Fire = 0  
Reactivity = 0  
Specific Hazard = 0

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



Health = 1  
Flammability = 0  
Reactivity = 0  
Special = 0

### 4 First aid measures:

- **General information:**

**After inhalation:** Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a doctor.

**After skin contact:** Immediately flush skin with plenty of soap and water for at least 15 minutes.

**After eye contact:** Immediately flush opened eye with plenty of water for at least 15 minutes. Consult a doctor.

**After Swallowing:** Immediately give 1-2 glasses of water and induce vomiting. Consult a doctor.

**Information for doctor:** Show this label



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## 5 Fire fighting measures:

- **Suitable extinguishing agents:** Foam, CO2, Dry chemical, water spray.
- **Protective equipment:** Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode.
- **Fire and Explosion Hazards:** Emits toxic fumes under fire conditions.

## 6 Accidental release measures:

- **Person-related safety precautions:** Avoid overexposure. Wear suitable protective clothing.
- **Measures for environmental protection:** Not Applicable
- **Measures for cleaning/collecting:** If amount is small, rinse area with water. If amount is large, contain spill and place into a clean, dry container and cover. Flush area with water.
- **Additional information:** See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment  
See Section 13 for information on disposal

## 7 Handling and storage:

- **Handling:**  
**Information for safe handling:** Lithium is extremely hygroscopic. Store in a tightly closed, dark glass or metal container. Store product in a cool, dry, well-ventilated area.  
**Information about protection against explosions and fires:** Emits toxic fumes under fire conditions.
- **Storage:**  
**Requirements to be met by storerooms and receptacles:** Keep container tightly closed. Store in a cool, dry well-ventilated area.  
**Information about storage in one common storage facility:** None  
**Further information about storage conditions:** None

## 8 Exposure controls and personal protection:

- **Additional information about design of technical systems:** Use mechanical exhaust ventilation.
- **Components with limit values that require monitoring at the workplace:** None
- **Additional information:** None
- **Personal Protective Equipment:**  
**General protective and hygienic measures:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Use with adequate ventilation.  
**Breathing equipment:** NIOSH/MSHA- approved respirator.  
**Protection of hands:** Use chemical-resistant gloves  
**Eye protection:** Use safety goggles



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**Body protection:** Wear appropriate protective clothing to prevent skin exposure.  
**Other Protective Equipment:** Eye bath and safety shower.

**09 Physical and chemical properties:**

- **General Information:**
  - Form:** Solid (Gel and crystals)
  - Color:** Tan gel and White crystals
  - Odor:** Odorless
- **Change in condition:**
  - Melting point/Melting range:** Not Available
  - Boiling point/Boiling range:** Not Available
- **Flash point:** Not Applicable
- **Flammability (solid, gaseous):** Not Applicable
- **Danger of explosion:** Product does not present an explosion hazard.
- **Vapor pressure:** Not Applicable
- **Density:** Not Applicable
- **Solubility in/Miscibility w/H<sub>2</sub>O:** Not Applicable
- **pH-value:** Not Available
  - Organic solvents:** Not Available
- **Solids content:** Not Available

**10 Stability and reactivity:**

- **Thermal decomposition / conditions to be avoided:** None
- **Materials to be avoided:** Hydrogen fluoride, strong acid and mineral acids, strong bases, strong alkalies, and strong oxidizing agents.
- **Dangerous reactions:** Stable; No dangerous reactions known.
- **Dangerous products of decomposition:** Oxides of silicon, and carbon monoxide and low molecular weight organic monomers when exposed to extreme heat.

**11 Toxicological information:**

- **Acute toxicity:**
  - Eye:** May cause eye irritation.
  - Skin:** May cause skin irritation.
  - Inhalation:** Lithium heparin may cause nosebleeds, irritation of the upper respiratory tract, lung damage pneumoconiosis, silicosis, and cyanosis.
  - Ingestion:** None Identified.
- **Primary irritant effect:**
  - On the skin:** Not established



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*On the eye: Not established*

- **Chronic Effects:** Repeated inhalation exposure to Lithium Heparin may cause lung damage, pneumoconiosis, cyanosis, and silicosis.

*On the skin: Not established*

*On the eye: Not established*

- **Sensitization:** Not established

- **Additional toxicological information:** Does not contain more than 0.1% by weight of a material listed as a potential carcinogen by NTP, IARC, or OSHA.

**12 Ecological information:**

- **Ecotoxicological effects:** No data is available on the adverse effects of this material on the environment. Neither COD nor BOD data are available.
- **Other information:** None
- **General notes:** Not Applicable.

**13 Disposal considerations:**

- **Product:**  
**Recommendation**  
Disposal should be done in accordance with local, state and federal regulations.  
Disposal must be made according to the regulations found in 40 CFR 261.  
This product is not a RCRA hazardous waste.
- **Uncleaned packagings:**  
**Recommendation**  
Disposal should be done in accordance with local, state and federal regulations.  
Disposal must be made according to the regulations found in 40 CFR 261.  
This product is not a RCRA hazardous waste.  
**Recommended cleansing agent**  
Water, if necessary with cleansing agents
- **General notes:** Not Applicable

**14 Transport information:**

- **DOT regulations:** Non-regulated
- **Land transport ADR/RID (cross-border):** Non-regulated
- **Maritime transport IMDG:** Non-regulated
- **Air transport ICAO-TI and IATA-DGR:** Non-regulated



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**15 Regulations:**

- **SARA Section 355 (extremely hazardous substances):** Substances not listed
- **SARA Section 302 (extremely hazardous substances):** Substances not listed
- **Section 313 (specific toxic chemical listings):** Substances not listed
- **SARA Section 304 (Reportable Quantity (RQ) under CERCLA):** None
- **SARA Section 311/312 (Hazard notification categories under SARA Title III):** None
- **TSCA (Toxic Substances Control Act) Inventory:** Substances Listed
- **Hazardous chemical(s) under OSHA Hazard Communication Standard (29 CFR 1910.1200):** None.
- **California Proposition 65 – Chemicals Known to Cause Cancer:** A component may contain trace amounts.
- **California Proposition 65 – Chemicals Known to Cause Reproductive Toxicity:** Substances not listed
- **Carcinogenicity categories**
  - IARC (International Agency for Research on Cancer):** Substances not listed
  - NTP (National Toxicology Program):** Substances not listed
  - TLV (Threshold Limit Value established by ACGIH):** Substances not listed
  - MAK (German Maximum Workplace Concentration):** Not available
- **Product related hazard information:** No additional information
- **National regulations:** The additive has not been classified as hazardous under the Chemicals (Hazard Information and Packaging) Regulations.
- **Water hazard class:** Not Assigned

**16 Other information:**

*To the best of our knowledge, the information contained herein is accurate. However, neither BD 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 cannot guarantee that these are the only hazards that exist.*

- **Department issuing MSDS:** Regulatory Affairs