



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

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Printing Date: 2005-Sep-29

Printing Date: Reviewed on

**Product Name:** *BD Vacutainer® Brand Tubes With Lithium Heparin*

**1 Identification of substance:**

• **Product Details:**

*MSDS Number: VS60306-10*

*Issue Date: September 26, 2005*

*Supersedes: August 26, 2003*

*ECO No.: ECO36214*

• **Product Name:** *BD Vacutainer® Brand Tubes With Lithium Heparin*

• **Catalog Numbers:** *365965, 365966, 365971, 366388, 366482, 366485, 366664, 366667, 367681, 367682, 367683, 367686, 367687, 367880, 367884, 367886, 367889, 368055 Discontinued: 365952, 367881, 368006, 368040, 368174*

• **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:**

*Lithium Heparin*

• **CAS No.:** *9045-22-1*

• **Quantity:** *0.2 – 1.1 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 nosebleeds. Do not allow contact with cut or scratched skin.

**• 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: None identified.

Skin: None identified.

Inhalation: May cause nosebleeds.

Ingestion: None identified.

**Repeated Exposure Effects:**

Eyes: None identified.

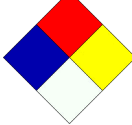
Skin: None identified.

Inhalation: May cause nosebleeds.

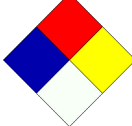
Ingestion: None identified.

**Primary Route of Entry:** Inhalation or ingestion.

**Medical conditions which might 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:** Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Consult a doctor.

**After skin contact:** Immediately wash with water and soap, and rinse thoroughly. Consult a doctor.

**After eye contact:** Rinse opened eye for 15 minutes under running water. If symptoms persist, consult a doctor.

**After Swallowing:** Consult a doctor.

**Information for doctor:** Show this label



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## 5 Fire fighting measures:

- **Suitable extinguishing agents:** Water spray.
- **Protective equipment:** Firefighters should wear self-contained breathing apparatus and proper protective equipment to prevent contact with skin and eyes.
- **Fire & Explosion hazards:** Emits toxic fumes under fire conditions.

## 6 Accidental release measures:

- **Person-related safety precautions:** Avoid overexposure. Wear suitable protective clothing. Avoid inhalation during cleanup.
- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:** If amount is small, rinse with water. If amount is large, contain spill and place into a clean, dry container and cover. Avoid raising dust. 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:** Keep container tightly closed. Avoid inhalation. Ensure good ventilation/exhaustion in the workplace.  
**Information about protection against explosions and fires:** Not Applicable
- **Storage:**  
**Requirements to be met by storerooms and receptacles:** Product is extremely moisture-sensitive. Store in a tightly closed dark glass or metal container. Store in a cool, dry place.  
**Information about storage in one common storage facility:** No further information.  
**Further information about storage conditions:** None

## 8 Exposure controls and personal protection:

- **Additional information about design of technical systems:** Use adequate mechanical exhaust ventilation to keep dust levels as low as possible.
- **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. Avoid prolonged or repeated exposure. Use with adequate ventilation.  
**Breathing equipment:** Use NIOSH/MSHA-approved respirator.



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**Protection of hands:** Use compatible chemical-resistant gloves.

**Eye protection:** Use chemical safety goggles.

**Body protection:** Wear appropriate protective clothing to prevent skin exposure. Do not allow contact with cut or scratched skin.

**Other Protective Equipment:** Eye bath, safety shower, and aprons.

**09 Physical and chemical properties:**

● **General Information:**

**Form:** Solid (crystals)

**Color:** White

**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 under normal conditions of use.

● **Vapor pressure:** Not Applicable

● **Density:** Not Available

● **Solubility in/Miscibility w/H<sub>2</sub>O:** Not Available

**Solubility in other solvents:** Not Available

● **pH-value:** Not Available

**Organic solvents:** Not Available

● **Specific gravity:** 0.5 (@ 25/25 °C)

**10 Stability and reactivity:**

● **Thermal decomposition / conditions to be avoided:** Avoid generation and accumulation of dusts.

● **Materials to be avoided:** None identified.

● **Dangerous reactions:** Stable; No dangerous reactions known.

● **Dangerous products of decomposition:** None identified.

**11 Toxicological information:**

● **Acute toxicity:**

**Eye:** None identified.

**Skin:** None identified.

**Inhalation:** May cause nosebleeds.

**Ingestion:** None Identified.



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- **Primary irritant effect:**  
*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):** Substance not listed
- **SARA Section 302 (extremely hazardous substances):** Substance not listed
- **Section 313 (specific toxic chemical listings):** Substance not listed
- **SARA Section 304 (Reportable Quantity (RQ) under CERCLA):** None
- **TSCA (Toxic Substances Control Act) Inventory:** Substance not listed
- **California Proposition 65 – Chemicals Known to Cause Cancer:** Substance not listed
- **California Proposition 65 – Chemicals Known to Cause Reproductive Toxicity:** Substance not listed
- **Carcinogenicity categories**
  - IARC (International Agency for Research on Cancer):** Substance not listed
  - NTP (National Toxicology Program):** Substance not listed
  - TLV (Threshold Limit Value established by ACGIH):** Substance 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