



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** BD Vacutainer® SST Tubes

**Other means of identification**

**Product code** 367782, 365967, 365968, 365978, 365979, 365906, 367966, 367968, 367974, 367976, 367977, 367979, 367981, 367983, 367985, 367986, 367987, 367988, 367989, 367991, 367997, 368013, 368015, 368016, 368159, 368825, 365979

**Recommended use** Blood collection (In-Vitro Diagnostic) device

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Company name** BD Diagnostics, PreAnalytical Systems

**Address** 1 Becton Drive  
Franklin Lakes, NJ 07417-1885

**Telephone** 800-631-0174

**Contact person** Technical Services

**Emergency telephone** Chemtrec US 1-800-424-9300 EU 703-527-3887

**E-mail** pas\_tech\_services@bd.com

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** This material is not considered hazardous by the OSHA Hazard Communication Standard, OSHA 29 CFR 1910.1200.

**Precautionary statement**

**Prevention** Observe good industrial hygiene practices.

**Response** Wash hands after handling.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Hydrophobic amorphous fumed silica	68611-44-9	1-5
Quartz	14808-60-7	0.1-<1.0

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. Components not listed are either non-hazardous or are below reportable limits.

## 4. First-aid measures

<b>Inhalation</b>	Due to the small packaging the risk of inhalation is minimal. In case of risk of inhalation of vapor/aerosols: Move person to fresh air.
<b>Skin contact</b>	Wash skin with soap and water. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids wide apart. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if any discomfort occurs.
<b>Most important symptoms/effects, acute and delayed</b>	May irritate eyes. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	By heating and fire, harmful vapors/gases may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.
<b>Fire fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Material may burn when exposed to sufficient heat.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Avoid inhalation of vapors. Avoid contact with eyes and prolonged skin contact. See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	Wipe up spilled material and place in a suitable container for disposal. Following product recovery, flush area with water. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Environmental manager must be informed of all major spillages.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid inhalation of vapors. Avoid contact with eyes and prolonged skin contact. Observe good laboratory hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Keep container closed. Store away from incompatible materials.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0.3 mg/m <sup>3</sup>	Total dust.
		0.1 mg/m <sup>3</sup>	Respirable.
		2.4 mppcf	Respirable.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0.025 mg/m <sup>3</sup>	Respirable fraction.

## US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Hydrophobic amorphous fumed silica (CAS 68611-44-9)	TWA	6 mg/m3	
Quartz (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).		
<b>Exposure guidelines</b>	No exposure limits noted for ingredient(s).		
<b>Appropriate engineering controls</b>	General ventilation normally adequate.		
<b>Individual protection measures, such as personal protective equipment</b>			
<b>Eye/face protection</b>	Risk of contact: Wear approved safety goggles.		
<b>Skin protection</b>			
<b>Hand protection</b>	For prolonged or repeated skin contact use suitable protective gloves. Nitrile gloves are recommended. Suitable gloves can be recommended by the glove supplier.		
<b>Skin protection</b>			
<b>Other</b>	No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.		
<b>Respiratory protection</b>	Under normal conditions, respirator is not normally required. If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.		
<b>Thermal hazards</b>	None.		
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Yellow.
<b>Odor</b>	Odorless.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.

### Upper/lower flammability or explosive limits

<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	No data available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.

**Other information**

<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.

**10. Stability and reactivity**

<b>Reactivity</b>	The product is stable and non reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Stable at normal conditions.
<b>Possibility of hazardous reactions</b>	Will not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	None expected under normal conditions of use.

**11. Toxicological information****Information on likely routes of exposure**

<b>Inhalation</b>	Due to the small packaging the risk of inhalation is minimal. However: Vapors may irritate throat and respiratory system and cause coughing.
<b>Skin contact</b>	May cause skin irritation.
<b>Eye contact</b>	May cause eye irritation.
<b>Ingestion</b>	Ingestion may cause irritation and malaise.

**Symptoms related to the physical, chemical and toxicological characteristics** May irritate eyes. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

**Information on toxicological effects**

**Acute toxicity** Not expected to be acutely toxic.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
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Hydrophobic amorphous fumed silica (CAS 68611-44-9)

**Acute***Inhalation*

LC50	Rat	0.45 mg/l, 4 hours
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**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.

**Respiratory or skin sensitization**

**Respiratory sensitization** Due to lack of data the classification is not possible.

**Skin sensitization** Due to lack of data the classification is not possible.

**Germ cell mutagenicity** Due to lack of data the classification is not possible.

**Carcinogenicity** Inhalation of quartz dust may cause cancer, however due to the physical form of the product, inhalation of dust is not likely.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Hydrophobic amorphous fumed silica (CAS 68611-44-9)	3 Not classifiable as to carcinogenicity to humans.
Quartz (CAS 14808-60-7)	1 Carcinogenic to humans.

**NTP Report on Carcinogens**

Quartz (CAS 14808-60-7)	Known To Be Human Carcinogen.
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**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**Reproductive toxicity** Due to lack of data the classification is not possible.

**Specific target organ toxicity - single exposure** Due to lack of data the classification is not possible.

**Specific target organ toxicity - repeated exposure** Due to lack of data the classification is not possible.

**Aspiration hazard** Due to lack of data the classification is not possible.

**Chronic effects** None known.

## 12. Ecological information

<b>Ecotoxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
<b>Persistence and degradability</b>	No data available.
<b>Bioaccumulative potential</b>	
<b>Mobility in soil</b>	No data available.
<b>Mobility in general</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

## 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not regulated.
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	Toluene (CAS 108-88-3) LISTED
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
<b>SARA 302 Extremely hazardous substance</b>	Not listed.
<b>SARA 311/312 Hazardous chemical</b>	No
<b>SARA 313 (TRI reporting)</b>	Not regulated.
<b>Other federal regulations</b>	
<b>Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List</b>	Toluene (CAS 108-88-3)
<b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</b>	Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

Toluene (CAS 108-88-3) 6594

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

Toluene (CAS 108-88-3) 35 %WV

**DEA Exempt Chemical Mixtures Code Number**

Toluene (CAS 108-88-3) 594

**US state regulations** WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Hydrophobic amorphous fumed silica (CAS 68611-44-9)  
Quartz (CAS 14808-60-7)  
Toluene (CAS 108-88-3)

**US. New Jersey Worker and Community Right-to-Know Act**

Quartz (CAS 14808-60-7)  
Toluene (CAS 108-88-3)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Hydrophobic amorphous fumed silica (CAS 68611-44-9)  
Quartz (CAS 14808-60-7)  
Toluene (CAS 108-88-3)

**US. Rhode Island RTK**

Toluene (CAS 108-88-3)

**US. California Proposition 65**

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Quartz (CAS 14808-60-7)  
Toluene (CAS 108-88-3)

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 01-October-2015  
**Revision date** 09-March-2016  
**Version #** 02  
**Further information** HMIS® is a registered trade and service mark of the NPCA.  
**HMIS® ratings** Health: 1  
Flammability: 1  
Physical hazard: 0

**NFPA ratings**



**List of abbreviations**

LC50: Lethal Concentration, 50%.

**References**

ACGIH: American Conference of Governmental and Industrial Hygienists.  
US. IARC Monographs on Occupational Exposures to Chemical Agents  
IARC Monographs. Overall Evaluation of Carcinogenicity  
National Toxicology Program (NTP) Report on Carcinogens  
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

**Disclaimer**

To the best of our knowledge, the information contained herein is accurate. However, neither BD nor any of its subsidiaries assumes any liability whatsoever for 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.

**This SDS contains revisions in the following section(s):**

1, 16.