



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** BD Vacutainer® C&S Urine Tubes  
**Other means of identification**  
**Product code** 364953, 364954, 364955, 364958, 364959, 364944, 364951, 364969  
**Recommended use** For urine collection and analysis.  
**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** Serious eye damage/eye irritation Category 2A  
Reproductive toxicity (fertility, the unborn child) Category 1B  
**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger  
**Hazard statement** Causes serious eye irritation. May damage fertility or the unborn child.  
**Precautionary statement**  
**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling.  
**Response** If exposed or concerned: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
**Storage** Store locked up.  
**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.  
**Hazard(s) not otherwise classified (HNOC)** None known.  
**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Borax decahydrate	1303-96-4	20-40
Boric acid	11113-50-1	10-30

**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

**Inhalation** No specific precautions due to the small quantities handled. However: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

**Skin contact** No specific precautions due to the small quantities handled. However: Wash skin thoroughly with soap and water. Get medical attention if irritation develops and persists.

**Eye contact** No specific precautions due to the small quantities handled. However, rinse with water. Do not rub eye. Make sure to remove any contact lenses from the eyes before rinsing. Get medical attention if irritation develops and persists.

**Ingestion** No specific precautions due to the small quantities handled. However: Rinse mouth thoroughly if dust is ingested. Get medical attention if any discomfort occurs.

**Most important symptoms/effects, acute and delayed** Under normal conditions of intended use, this material does not pose a risk to health.

**Indication of immediate medical attention and special treatment needed** Treat symptomatically.

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### 5. Fire-fighting measures

**Suitable extinguishing media** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media** None.

**Specific hazards arising from the chemical** During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters** Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions** Use standard firefighting procedures and consider the hazards of other involved materials. Containers close to fire should be removed or cooled with water.

**General fire hazards** The product itself does not burn.

#### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Provide adequate ventilation. Avoid dust formation. Avoid inhalation of dust and contact with skin and eyes. See Section 8 of the SDS for Personal Protective Equipment. As supplied, the product is expected to pose no immediate health or fire hazard.

**Methods and materials for containment and cleaning up** Collect dust using a vacuum cleaner equipped with HEPA filter. For waste disposal, see section 13 of the SDS.

**Environmental precautions** Avoid discharge into drains, water courses or onto the ground unless authorized by permit.

#### 7. Handling and storage

**Precautions for safe handling** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pregnant women should not work with the product, if there is the least risk of exposure. Provide adequate ventilation. Avoid generation and spreading of dust. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Keep the workplace clean. Observe good industrial hygiene practices. As supplied, the product is expected to pose no immediate health or fire hazard.

**Conditions for safe storage, including any incompatibilities** Store in original tightly closed container. Store in a cool, dry place.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Borax decahydrate (CAS 1303-96-4)	STEL	6 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Borax decahydrate (CAS 1303-96-4)	TWA	5 mg/m3

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear dust goggles.

#### Skin protection

##### Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

##### Skin protection

##### Other

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.

#### Respiratory protection

If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory protection must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134.

#### Thermal hazards

None.

### General hygiene considerations

When using, do not eat, drink or smoke. Do not get this material on clothing. Wash hands after handling and before eating. Keep away from food and drink. Wash hands after handling. 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

#### Physical state

Solid.

#### Form

Powder.

#### Color

Not available.

#### Odor

Not available.

#### Odor threshold

Not applicable.

#### pH

Not applicable.

#### Melting point/freezing point

Not applicable.

#### Initial boiling point and boiling range

Not applicable.

#### Flash point

Not applicable.

#### Evaporation rate

Not applicable.

#### Flammability (solid, gas)

Non combustible.

### Upper/lower flammability or explosive limits

#### Flammability limit - lower (%)

Not applicable.

#### Flammability limit - upper (%)

Not applicable.

#### Vapor pressure

Not applicable.

<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	Not applicable.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not applicable.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	Not applicable.
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Density</b>	Not applicable.
<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>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	High temperatures. Avoid dust formation. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	None under normal temperatures and pressures.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Dust may irritate respiratory system.
<b>Skin contact</b>	Dust may irritate skin.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	May cause discomfort if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics** Under normal conditions of intended use, this material does not pose a risk to health.

### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be acutely toxic.
<b>Skin corrosion/irritation</b>	Due to lack of data the classification is not possible.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.

### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Due to lack of data the classification is not possible.
<b>Skin sensitization</b>	Due to lack of data the classification is not possible.

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

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

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

#### NTP Report on Carcinogens

Not listed.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

**Reproductive toxicity** May damage fertility or the unborn child.  
Boric acid: High doses have demonstrated effects on fertility, testes, and developmental effects on the fetus in laboratory animals. Relevance of these findings to humans is uncertain.

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

<b>Specific target organ toxicity - repeated exposure</b>	Due to lack of data the classification is not possible.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	Prolonged skin contact may cause dermatitis.
<b>Further information</b>	As supplied, the product is expected to pose no immediate health or fire hazard.

## 12. Ecological information

<b>Ecotoxicity</b>	The product is 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>	The product contains inorganic compounds which are not biodegradable.
<b>Bioaccumulative potential</b>	Not relevant for inorganic substances.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	The product is not volatile but may be spread by dust-raising handling.

## 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. 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 a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 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>	Not listed.
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
<b>Hazard categories</b>	Immediate Hazard - Yes Delayed Hazard - Yes 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>	Yes

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.**US state regulations****US. Massachusetts RTK - Substance List**

Borax decahydrate (CAS 1303-96-4)

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

Borax decahydrate (CAS 1303-96-4)

Boric acid (CAS 11113-50-1)

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

Borax decahydrate (CAS 1303-96-4)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

Not Listed.

**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**

<b>Issue date</b>	17-May-2016
<b>Revision date</b>	-
<b>Version #</b>	01
<b>HMIS® ratings</b>	Health: 2* Flammability: 0 Physical hazard: 0

**NFPA ratings****References**

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

**Disclaimer**

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