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07417 USA  
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# SAFETY DATA SHEET

## 1. Identification

### Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
362760	TUBE CPTCIT GC 13X100 4.0 MLBL BL/BLK	BD Vacutainer® CPT™ Cell Preparation Tube with Sodium Citrate

### Other means of identification

SDS number: 088100181120

### Recommended use and restriction on use

**Recommended use:** Scientific and industrial laboratory use. For In Vitro Diagnostic Use.

**Restrictions on use:** For External Use Only

### Manufacturer/Importer/Supplier/Distributor Information

#### Manufacturer

Company Name: BD - Canada  
Address: 2100 Derry Road West  
L5N 0B3 Mississauga, Ontario Canada  
Telephone: 866 979 9408  
Fax:  
Contact Person: Environment, Health & Safety  
E-mail: CUSTOMER\_SERVICE\_CANADA@bd.com

**Emergency telephone number:** CHEMTREC +001-703-527-3887 (International)

## 2. Hazard(s) identification

### Hazard Classification

#### Health Hazards

Respiratory sensitizer Category 1  
Skin sensitizer Category 1

### Label Elements

#### Hazard Symbol:



**Signal Word:** Danger



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**Hazard Statement:** H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H317: May cause an allergic skin reaction.

**Precautionary Statements**

**Prevention:** P261: Avoid breathing dust/fume/gas/mist/vapors/spray.  
P272: Contaminated work clothing should not be allowed out of the workplace.  
P280: Wear protective gloves.  
P284: [In case of inadequate ventilation] wear respiratory protection.

**Response:** P302+P352: IF ON SKIN: Wash with plenty of soap and water.  
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.  
P321: Specific treatment (see supplemental first aid instructions on this label).  
P362+P364: Take off contaminated clothing and wash it before reuse.  
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician.

**Disposal:** P501: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

**Other hazards which do not result in GHS classification** None.

**3. Composition/information on ingredients**

**Mixtures**

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Sodium amidotrizoate	No data available.	737-31-5	1 - 5%
Titanium oxide (TiO <sub>2</sub> )	No data available.	13463-67-7	0 - 0.1%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**4. First-aid measures**

**General information:** Get medical attention if symptoms occur.

**Ingestion:** Rinse mouth thoroughly. Never give liquid to an unconscious person. Get medical attention if symptoms occur.

**Inhalation:** Move into fresh air and keep at rest. Treat symptomatically. Get medical attention if symptoms occur.



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**Skin Contact:** Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention if symptoms occur. Wash contaminated clothing before reuse.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if symptoms occur.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** No data available.

**Hazards:** May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Get medical attention if symptoms occur.

**5. Fire-fighting measures**

**General Fire Hazards:** Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Water spray, fog, CO2, dry chemical, or alcohol resistant foam.

**Unsuitable extinguishing media:** None known.

**Specific hazards arising from the chemical:** None known.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** No unusual fire or explosion hazards noted.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** See Section 8 of the SDS for Personal Protective Equipment.



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**Methods and material for containment and cleaning up:** Sweep or scoop up and remove. Prevent runoff from entering drains, sewers, or streams.

**Environmental Precautions:** Do not release into the environment.

## 7. Handling and storage

**Precautions for safe handling:** Wear appropriate personal protective equipment. When using do not eat, drink or smoke. Low hazard for recommended handling by trained personnel.

**Conditions for safe storage, including any incompatibilities:** Keep containers tightly closed. Keep the container in a safe place. Keep in a cool, well-ventilated place.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Titanium oxide (TiO <sub>2</sub> )	TWA	10 mg/m <sup>3</sup>	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
Titanium oxide (TiO <sub>2</sub> ) - Respirable fraction.	TWA	3 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Titanium oxide (TiO <sub>2</sub> ) - Total dust.	TWA	10 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Titanium oxide (TiO <sub>2</sub> )	TWA	10 mg/m <sup>3</sup>	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011)
Titanium oxide (TiO <sub>2</sub> )	TWA	10 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Titanium oxide (TiO <sub>2</sub> )	8 HR ACL	10 mg/m <sup>3</sup>	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	15 MIN ACL	20 mg/m <sup>3</sup>	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)



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Titanium oxide (TiO <sub>2</sub> ) - Total dust.	TWA	10 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Titanium oxide (TiO <sub>2</sub> )	TWA	10 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values, as amended (12 2010)

**Appropriate Engineering Controls**

Observe good industrial hygiene practices. Low hazard for recommended handling by trained personnel.

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

- General information:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.
- Eye/face protection:** Avoid contact with eyes and prolonged skin contact. Protective gloves and goggles must be used if there is a risk of direct contact or splash.
- Skin Protection**
  - Hand Protection:** Use suitable protective gloves if risk of skin contact.
  - Skin protection:** No data available.
- Respiratory Protection:** In case of inadequate ventilation use suitable respirator.
- Hygiene measures:** Avoid contact with skin. Do not eat, drink or smoke when using the product. Observe good industrial hygiene practices.

**9. Physical and chemical properties**

**Appearance**

- Physical state:** Solid
- Form:** Gel
- Color:** Pale yellow
- Odor:** Characteristic
- Odor threshold:** No data available.
- pH:** No data available.
- Melting point/freezing point:** No data available.
- Initial boiling point and boiling range:** No data available.
- Flash Point:** No data available.
- Evaporation rate:** No data available.
- Flammability (solid, gas):** No data available.
- Upper/lower limit on flammability or explosive limits**
  - Flammability limit - upper (%):** No data available.
  - Flammability limit - lower (%):** No data available.



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<b>Explosive limit - upper:</b>	No data available.
<b>Explosive limit - lower:</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	No data available.
<b>Relative density:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	No data available.
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

## 10. Stability and reactivity

<b>Reactivity:</b>	Stable under normal temperature conditions and recommended use.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	Material is stable under normal conditions.
<b>Conditions to avoid:</b>	None under normal conditions.
<b>Incompatible Materials:</b>	None under normal conditions.
<b>Hazardous Decomposition Products:</b>	Material is stable under normal conditions.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion:</b>	No data available.
<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Ingestion:</b>	No data available.
<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.



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**Eye contact:** No data available.

**Information on toxicological effects**

**Acute toxicity (list all possible routes of exposure)**

**Oral**

**Product:** No data available.

**Specified substance(s):**

Titanium oxide (TiO<sub>2</sub>)  
LD 50 (Mouse): > 5,000 mg/kg  
LD 50 (Rat): > 5,000 mg/kg  
LD 50 (Rat): > 25,000 mg/kg  
LD 50 (Rat): > 11,000 mg/kg  
LD 50 (Rat): > 5,000 mg/kg

**Dermal**

**Product:** No data available.

**Inhalation**

**Product:** No data available.

**Specified substance(s):**

Titanium oxide (TiO<sub>2</sub>)  
LC 50 (Rat, 4 h): 5.09 mg/l  
LC 50 (Rat, 4 h): > 6.82 mg/l

**Repeated dose toxicity**

**Product:** No data available.

**Specified substance(s):**

Titanium oxide (TiO<sub>2</sub>)  
NOAEL (Rat(Female, Male), Inhalation): 5 mg/m<sup>3</sup> Inhalation Experimental result, Supporting study  
LOAEL (Mouse(female), Inhalation): 47 mg/m<sup>3</sup> Inhalation Experimental result, Supporting study  
LOAEL (Mouse(female), Inhalation): 10.8 mg/m<sup>3</sup> Inhalation Experimental result, Supporting study  
NOAEL (Hamster, Syrian(female), Inhalation): 9.9 mg/m<sup>3</sup> Inhalation Experimental result, Supporting study  
NOAEL (Rat(female), Inhalation): 9.5 mg/m<sup>3</sup> Inhalation Experimental result, Supporting study

**Skin Corrosion/Irritation**

**Product:** No data available.

**Specified substance(s):**

Titanium oxide (TiO<sub>2</sub>) in vivo (Rabbit): Not irritant Experimental result, Supporting study



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**Serious Eye Damage/Eye Irritation**

**Product:** No data available.

**Specified substance(s):**

Titanium oxide (TiO<sub>2</sub>) in vivo (Rabbit, 1 hrs): Not irritating EU  
in vivo (Rabbit, 24 hrs): Not irritating EU  
in vivo (Rabbit, 48 - 72 hrs): Minimal irritant EU  
in vivo (Rabbit, 24 hrs): Not irritating EU  
in vivo (Rabbit, 1 hrs): Minimal irritant EU  
in vivo (Rabbit, 48 - 72 hrs): Not irritating EU  
in vivo (Rabbit, 24 hrs): Minimal irritant EU  
in vivo (Rabbit, 24 - 72 hrs): Not irritating EU  
in vivo (Rabbit, 1 hrs): Not irritating EU  
in vivo (Rabbit, 24 - 72 hrs): Minimal irritant EU  
in vivo (Rabbit, 48 - 72 hrs): Not irritating EU

**Respiratory or Skin Sensitization**

**Product:** No data available.

**Specified substance(s):**

Titanium oxide (TiO<sub>2</sub>) Skin sensitization:, in vivo/in vitro (Guinea pig): Non sensitising

**Carcinogenicity**

**Product:** No data available.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**ACGIH Carcinogens:**

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**

**Product:** No data available.

**In vivo**

**Product:** No data available.

**Reproductive toxicity**

**Product:** No data available.

**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**





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**Product:** No data available.

**Aspiration Hazard Product:** No data available.

**Other effects:** No data available.

**12. Ecological information**

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Specified substance(s):**

Titanium oxide (TiO<sub>2</sub>)  
LC 50 (Cyprinodon variegatus, 96 h): > 10,000 mg/l Experimental result, Weight of Evidence study  
LC 50 (Oncorhynchus mykiss, 96 h): > 100 mg/l Experimental result, Weight of Evidence study  
EC 50 (Danio rerio, 96 h): > 100 mg/l Experimental result, Not specified  
NOAEL (Oncorhynchus mykiss, 96 h): >= 100 mg/l Experimental result, Weight of Evidence study  
LC 50 (Cyprinodon variegatus, 96 h): > 240 - < 370 mg/l Experimental result, Not specified

**Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**

Titanium oxide (TiO<sub>2</sub>)  
EC 50 (Water flea (Daphnia magna), 48 h): > 1,000 mg/l Intoxication  
EC 50 (Daphnia magna, 48 h): > 100 mg/l Experimental result, Not specified  
EC 50 (Daphnia magna, 48 h): > 1,000 mg/l Experimental result, Weight of Evidence study  
EC 50 (Daphnia magna, 48 h): > 100 mg/l Experimental result, Supporting study  
EC 50 (Daphnia magna, 48 h): > 1,000 mg/l Experimental result, Weight of Evidence study

**Chronic hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Specified substance(s):**

Titanium oxide (TiO<sub>2</sub>)  
ED 0 (Phoxinus phoxinus, 30 d): >= 1,000 mg/l Experimental result, Supporting study  
LC 0 (Coregonus autumnalis migratorius G., 30 d): 3 mg/l Experimental result, Supporting study



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**Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**

Titanium oxide (TiO<sub>2</sub>)  
EC 50 (Nitokra spinipes, 13 d): 2.03 mg/l Experimental result, Supporting study  
EC 50 (Nitokra spinipes, 13 d): 107.4 mg/l Experimental result, Supporting study  
EC 100 (Daphnia magna, 30 d): 500 mg/l Experimental result, Supporting study  
LC 100 (Daphnia magna, 18 d): 1,000 mg/l Experimental result, Supporting study

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**

**Product:** No data available.

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative potential**

**Bioconcentration Factor (BCF)**

**Product:** No data available.

**Specified substance(s):**

Titanium oxide (TiO<sub>2</sub>)  
Cyprinus carpio, Bioconcentration Factor (BCF): 550 Aquatic sediment Experimental result, Supporting study  
Cyprinus carpio, Bioconcentration Factor (BCF): 74 Aquatic sediment Experimental result, Supporting study  
Cyprinus carpio, Bioconcentration Factor (BCF): 325 Aquatic sediment Experimental result, Supporting study  
Oncorhynchus mykiss, Bioconcentration Factor (BCF): 19 - 208 Aquatic sediment Experimental result, Key study  
Cyprinus carpio, Bioconcentration Factor (BCF): 9 Aquatic sediment Experimental result, Supporting study

**Partition Coefficient n-octanol / water (log K<sub>ow</sub>)**

**Product:** No data available.

**Mobility in soil:** No data available.

**Known or predicted distribution to environmental compartments**



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Sodium amidotrizoate No data available.  
Titanium oxide (TiO<sub>2</sub>) No data available.

**Other adverse effects:** No data available.

### 13. Disposal considerations

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

**Contaminated Packaging:** No data available.

### 14. Transport information

**DOTUN Number:** Not regulated.  
**UN Proper Shipping Name:** Not regulated.  
**Transport Hazard Class(es)**  
Class: Not regulated.  
Label(s): Not regulated.  
**Packing Group:** Not regulated.  
**Marine Pollutant:** Not regulated.  
Limited quantity Not regulated.  
Excepted quantity Not regulated.

**Special precautions for user:** Not regulated.

#### IMDG

**UN Number:** Not regulated.  
**UN Proper Shipping Name:** Not regulated.  
**Transport Hazard Class(es)**  
Class: Not regulated.  
Subsidiary risk: Not regulated.  
EmS No.: Not regulated.

**Packing Group:** Not regulated.  
**Environmental Hazards**  
Marine Pollutant: Not regulated.

**Special precautions for user:** Not regulated.

#### TDG

**UN Number** Not regulated.  
**Proper Shipping Name** Not regulated.  
**Class** Not regulated.  
**Packing Group** Not regulated.  
**Label(s)** Not regulated.  
**Subsidiary risk label** Not regulated.

**Special precautions for user:** Not regulated.



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**IATA**

UN Number: Not regulated.  
Proper Shipping Name: Not regulated.  
Transport Hazard Class(es):  
    Class: Not regulated.  
    Subsidiary risk: Not regulated.  
Packing Group: Not regulated.  
Environmental Hazards  
    Marine pollutant: Not regulated.  
  
Special precautions for user: Not regulated.

**15. Regulatory information**

**Canada Federal Regulations**

**List of Toxic Substances (CEPA, Schedule 1)**  
Not Regulated

**Export Control List (CEPA 1999, Schedule 3)**  
Not Regulated

**National Pollutant Release Inventory (NPRI)**

**Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional Reporting Requirements**  
NPRI PT5 Not Regulated

**Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4)**  
NPRI Not Regulated

**Greenhouse Gases**

Not Regulated

**Controlled Drugs and Substances Act**

CA CDSI Not Regulated  
CA CDSII Not Regulated  
CA CDSIII Not Regulated  
CA CDSIV Not Regulated  
CA CDSV Not Regulated  
CA CDSVII Not Regulated  
CA CDSVIII Not Regulated

**Precursor Control Regulations**

Not Regulated



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## International regulations

### Montreal protocol

Not applicable

### Stockholm convention

Not applicable

### Rotterdam convention

Not applicable

### Kyoto protocol

Not applicable

<b>16. Other information, including date of preparation or last revision</b>
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**Issue Date:** 09/30/2021

**Version #:** 1.0

**Revision Information:**

**Further Information:** No data available.

**Disclaimer:** Disclaimer:  
The information contained herein has been obtained from various sources and is believed to be correct as of the date issued. However, neither BD nor any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability for a particular use 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. BD provides SDS in electronic form so the information may be more easily accessed. Due to the possibility of errors during transmission, BD makes no representations as to the completeness or accuracy of the information.