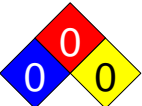


## 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Product name:** *FACS SHUTDOWN SOLUTION*
- **Catalog number:** 334224
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** SU24 Scientific research and development
  
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Becton, Dickinson and Company  
BD Biosciences  
2350 Qume Drive  
San Jose, CA 95131  
Tel: (408)232-8995  
bdbiosciences.com
- **Information department:** Technical Services
- **Emergency telephone number:**  
In case of a chemical emergency, spill, fire, or exposure, call BD Biosciences at (877)232-8995, or ChemTrec at (800)424-9300.

## 2 Hazards identification

- **Classification of the substance or mixture**  
The product is not classified according to the Globally Harmonized System (GHS).
  
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**  
This product contains no hazardous constituents, or the concentration of all chemical constituents are below the regulatory threshold limits described by Occupational Safety Health Administration Hazard Communication Standard 29 CFR 1910.1200 and the European Directive 91/155/EEC, and 93/112/EC.  
Void
- **Classification system:**  
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
  
- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Classification system**
- **NFPA ratings (scale 0-4)**  
  
Health = 0  
Flammability = 0  
Reactivity = 0
  
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## 3 Composition/information on ingredients

- **Chemical characterization:** *Mixtures*
- **Description:** *Mixture of the substances listed below with nonhazardous additions.*

**Product name: FACS SHUTDOWN SOLUTION**

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**· Dangerous components:****· CAS NO. Description % Void****4 First aid measures**

- **Description of first aid measures**
- **General information** No special measures required.
- **After inhalation** Seek medical treatment in case of complaints.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing** If symptoms persist consult doctor.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

**5 Firefighting measures**

- **Extinguishing media**
- **Suitable extinguishing agents**  
CO<sub>2</sub>, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Wipe up with damp sponge or mop.
- **Methods and material for containment and cleaning up:** No special measures required.
- **Reference to other sections** No dangerous substances are released.

**7 Handling and storage**

- **Handling**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** 20-25C
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed containers.

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USA

**Product name: FACS SHUTDOWN SOLUTION**

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· **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
 The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal Protective Equipment**
- **General protective and hygienic measures**  
 The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Chemical resistant gloves (i.e. nitrile, or equivalent).

- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing (lab coat).

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	Clear
<b>Odor:</b>	Characteristic
- **pH-value:** 7.2-7.6
- **Change in condition** Undetermined
- **Melting point/Melting range:** 0°C (32 °F)
- **Boiling point/Boiling range:** 100°C (212 °F)
- **Flash point:** Not applicable
- **Auto igniting:** Product is not self igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Vapor pressure at 20°C (68 °F):** 23 hPa (17 mm Hg)
- **Density at 20°C (68 °F):** 1 g/cm<sup>3</sup> (8.345 lbs/gal)
- **Solubility in / Miscibility with Water:** Soluble
- **Solvent content:**

<b>Organic solvents:</b>	0.2 %
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(Contd. of page 3)

- |                          |  |
|--------------------------|--|
| <b>Water:</b>            | 99.8 %                                     |
| <b>Other information</b> | No further relevant information available. |

### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** Incompatible material: strong oxidizers.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritating effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product is not subject to OSHA classification according to internally approved calculation methods for preparations.  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Other information:**  
The ecological effects have not been thoroughly investigated, but currently none have been identified.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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Reviewed on 09/14/2012

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 · **Other adverse effects** No further relevant information available.

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### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
 Smaller quantities can be disposed of with solid waste.  
 This product is not considered a RCRA hazardous waste.  
 Dispose of material in accordance with federal (40 CFR 261), state and local requirements.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to state and federal regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

· <b>UN-Number</b>	
· <b>DOT, ADR, ADN, IMDG, IATA</b>	Void
· <b>UN proper shipping name</b>	
· <b>DOT, ADR, ADN, IMDG, IATA</b>	Void
· <b>Transport hazard class(es)</b>	
· <b>DOT, ADR, ADN, IMDG, IATA</b>	
· <b>Class</b>	Void
· <b>Packing group</b>	
· <b>DOT, ADR, IMDG, IATA</b>	Void
· <b>Environmental hazards:</b>	
· <b>Marine pollutant:</b>	No
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	-

### 15 Regulatory information

· <b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>
· <b>SARA Section 355 (extremely hazardous substances)</b> None of the ingredients is listed.
· <b>SARA Section 313 (specific toxic chemical listings)</b> None of the ingredients is listed.
· <b>TSCA (Toxic Substances Control Act)</b> All ingredients are listed.
· <b>California Proposition 65 - Chemicals known to cause cancer</b> None of the ingredients is listed.

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**· Chemicals known to cause reproductive toxicity for females:**
*None of the ingredients is listed.*
**· Chemicals known to cause reproductive toxicity for males:**
*None of the ingredients is listed.*
**· Chemicals known to cause developmental toxicity:**
*None of the ingredients is listed.*
**· Carcinogenic categories**
**· TLV (Threshold Limit Value established by ACGIH)**
*None of the ingredients is listed.*
**· GHS label elements Void**
**· Hazard pictograms Void**
**· Signal word Void**
**· Hazard statements Void**
**· National regulations**
**· Technical instructions (air):**

Class	Share in %
Wasser	99.8
NK	0.2

**· Water hazard class: Generally not hazardous for water.**
**· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**
**16 Other information**

To the best of our knowledge, the information contained herein is accurate. However, neither Becton, Dickinson and Company 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: Safety and Environment Department**
**· Contact: Technical Service Representative**
**· Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)