

Date Prepared: 03/01/2011

Reviewed On: 02/11/2011

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


- **Product Identifier**
- **Product Name:** Gram Crystal Violet
- **Catalog Number:** 212525
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 BD Diagnostic Systems  
 7 Loveton Circle  
 Sparks, MD 21152  
 Telephone.: (410) 771 - 0100 or (800) 638 – 8663
- **Information Department:** Technical Service
- **Emergency telephone number:**  
 In case of a chemical emergency, spill, fire, exposure, or accident contact BD Diagnostic Systems (410) 771-0100 or (800)-638-8663, or ChemTrec at (800) 424-9300.

### 2 Composition/information on ingredients

- **Chemical characterization: Substances**
- **Identification number(s):**
- **EINECS Number:** 2089536
- **Chemical characterization: Mixture**
- **Description:** Mixture consisting of the following components.

· <b>Dangerous Components:</b>		
67-63-0	isopropanol	5.0%
67-56-1	methanol	2.4%
64-17-5	ethanol	2.4%
548-62-9	C.I. Basic Violet 3	0.4%

### 3 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**  
 Xn; Harmful  
 R40: Limited evidence of a carcinogenic effect.  
 R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **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**
- **Labelling according to EU guidelines:**  
 The product has been classified and marked in accordance with regulations on hazardous materials.
- **Code letter and hazard designation of product:**  
 Xn Harmful
- **Hazard-determining components of labelling:**  
 ethanol  
 methanol  
 isopropanol

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C.I. Basic Violet 3

**· Risk phrases:**

- 40 Limited evidence of a carcinogenic effect.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**· Safety phrases:**

- 7 Keep container tightly closed.
- 16 Keep away from sources of ignition - No smoking.
- 25 Avoid contact with eyes.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37 Wear suitable protective clothing and gloves.
- 61 Avoid release to the environment. Refer to special instructions/Safety data sheets

**· NFPA ratings (scale 0-4)**

Health = 2  
Fire = 2  
Reactivity = 0

**· HMIS ratings (scale 0-4)**

Health = 2  
Fire = 2  
Reactivity = 0

**4 First aid measures****· General information**

Symptoms of poisoning may even occur after several hours; therefore provide medical observation for at least 48 hours after the accident.

- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for 15 minutes under running water. Then consult a doctor.
- **After swallowing** Immediately call a doctor.
- **Information for doctor** Show this product label or this MSDS.

**5 Firefighting measures****· Suitable extinguishing agents**

CO<sub>2</sub>, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **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:** Absorb liquid components with liquid-binding material.

**· Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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## 7 Handling and storage

- **Handling**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** 15 - 30 °C
- **Information about storage in one common storage facility:**  
 Store away from oxidizing agents.  
 Do not store together with acids.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed containers.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see Section 7.

- **Components with limit values that require monitoring at the workplace:**

### 67-63-0 isopropanol

PEL	980 mg/m <sup>3</sup> , 400 ppm
REL	Short-term value: 1225 mg/m <sup>3</sup> , 500 ppm Long-term value: 980 mg/m <sup>3</sup> , 400 ppm
TLV	Short-term value: 984 mg/m <sup>3</sup> , 400 ppm Long-term value: 492 mg/m <sup>3</sup> , 200 ppm

### 67-56-1 methanol

PEL	260 mg/m <sup>3</sup> , 200 ppm
REL	Short-term value: 325 mg/m <sup>3</sup> , 250 ppm Long-term value: 260 mg/m <sup>3</sup> , 200 ppm Skin
TLV	Short-term value: 328 mg/m <sup>3</sup> , 250 ppm Long-term value: 262 mg/m <sup>3</sup> , 200 ppm Skin; BEI

### 64-17-5 ethanol

PEL	1900 mg/m <sup>3</sup> , 1000 ppm
REL	1900 mg/m <sup>3</sup> , 1000 ppm
TLV	1880 mg/m <sup>3</sup> , 1000 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Personal Protective Equipment**

- **General protective and hygienic measures**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes and skin.

- **Breathing equipment:**

- In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respirator.

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**· 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**
**· General Information**
**· Appearance:**
**Form:** Liquid

**Color:** Purple

**· Odor:** Characteristic

**· pH-value:** Not applicable

**· Change in condition**
**Melting point/Melting range:** Not determined

**Boiling point/Boiling range:** Not determined

**· Flash point:** 43°C (109 °F)

**· Auto igniting:** Product is not self igniting.

**· Danger of explosion:** Product does not present an explosion hazard.

**· Density:** Not determined

**· Solubility in / Miscibility with**
**Water:** Slightly soluble

**· Solvent content:**
**Organic solvents:** 9.8 %

**10 Stability and reactivity**
**· Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**· Incompatible materials:** Incompatible materials: strong acids and oxidizers.

**· Hazardous decomposition products:**

 Nitrogen oxides (NO<sub>x</sub>)

 Carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>)

 Ammonia (NH<sub>4</sub>)

**11 Toxicological information**
**· Acute toxicity:**
**· LD/LC50 values that are relevant for classification:**
**64-17-5 ethanol**

Oral LD50 3450 mg/kg (MOU)

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		7060 mg/kg (rat)
<b>548-62-9 C.I. Basic Violet 3</b>		
Oral	LD50	96 mg/kg (mou)

- **Primary irritant effect:**
- **on the skin:** No irritating effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:** Target organs: thyroid, kidney, ureter or bladder tumors.
- **Additional toxicological information:**  
 The product shows the following dangers according to internally approved calculation methods for preparations:

### 12 Ecological information

- **Acquatic toxicity:** This material is not expected to be toxic to aquatic life.
- **Ecotoxicological effects:**
- **Other information:**  
 The ecological effects have not been thoroughly investigated, but currently none have been identified.
- **Additional ecological information:**
- **General notes:** Water hazard class 2 (Self-assessment): hazardous for water.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
 Must not be disposed of with solid waste.  
 Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements.  
 This product is not considered a RCRA hazardous waste.
- **Uncleaned packagings:**
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

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· **Transport/Additional information:**

If a dashed line appears in the Hazard Class section for the type of transportation, this indicates the product is not regulated for transportation.

**15 Regulatory information**

· **SARA Section 355 (extremely hazardous substances)**

None of the ingredients is listed.

· **SARA Section 313 (specific toxic chemical listings)**

67-63-0 isopropanol

67-56-1 methanol

64-17-5 ethanol

· **TSCA (Toxic Substances Control Act)**

All ingredients are listed.

· **California Proposition 65 - Chemicals known to cause cancer**

None of the ingredients is listed.

· **California Proposition 65 - Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **California Proposition 65 - Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **California Proposition 65 - Chemicals known to cause developmental toxicity:**

64-17-5 ethanol

· **Carcinogenic categories**

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

67-63-0 isopropanol

A4

64-17-5 ethanol

A4

**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 can not guarantee that these are the only hazards that exist.

· **Department issuing MSDS:**

Environmental, Health & Safety

Created by Michael J. Spinazzola

· **Contact:** Technical Service Representative