

1 Identification of substance:

- **Product name:** Gram Crystal Violet
- **Catalog number:** 212526
- **Manufacturer/Supplier:**
BD Diagnostic Systems
7 Loveton Circle
Sparks, MD 21152
Tel: (410) 771-0100 or (800) 638-8663
- **Information department:** Technical Services
- **Emergency information:**
In case of a chemical emergency, spill, fire, exposure, or accident contact BD Diagnostic Systems at (410)771-0100 or (800)638-8663, or ChemTrec at (800)424-9300.

2 Composition/Data on components:

- **Chemical characterization:**
- **Identification number(s):**
- **EINECS Number:** 2089536
- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

67-63-0	isopropanol	5.0%
64-17-5	ethanol	2.4%
548-62-9	C.I. Basic Violet 3	0.4%
67-56-1	methanol	2.4%

3 Hazards identification

· **Hazard description:**



Xn Harmful

· **Information pertaining to particular dangers for man and environment**

R 40 Limited evidence of a carcinogenic effect.

R 52/53 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.

· **NFPA ratings (scale 0-4)**



Health = 2

Fire = 0

Reactivity = 0

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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.
- **The following symptoms may occur:**

Dizziness
Headache

5 Fire fighting measures**· Suitable extinguishing agents**

CO₂, 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

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Wipe up with damp sponge or mop.
- **Measures for cleaning/collecting:** Absorb liquid components with liquid-binding material.

7 Handling and storage**· Handling**

- **Information 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 and personal protection

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

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· Components with limit values that require monitoring at the workplace:

67-63-0 isopropanol

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

67-56-1 methanol

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

64-17-5 ethanol

PEL	1900 mg/m ³ , 1000 ppm
REL	1900 mg/m ³ , 1000 ppm
TLV	1880 mg/m ³ , 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.

· 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

Form:	Liquid
Color:	Purple
Odor:	Characteristic

· Change in condition

Melting point/Melting range: Not determined
Boiling point/Boiling range: Not determined

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· Flash point:	<i>Not applicable</i>
· Auto igniting:	<i>Product is not self igniting.</i>
· Danger of explosion:	<i>Product does not present an explosion hazard.</i>
· Density:	<i>Not determined</i>
· Solubility in / Miscibility with Water:	<i>Slightly soluble</i>
· Solvent content:	
Organic solvents:	<i>9.8 %</i>

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Materials to be avoided:** *Incompatible materials: strong acids and oxidizers.*
- **Dangerous products of decomposition:**
*Nitrogen oxides (NO_x)
Carbon monoxide (CO) and carbon dioxide (CO₂)
Ammonia (NH₄)*

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

64-17-5 ethanol

Oral	LD50	3450 mg/kg (MOU)
		7060 mg/kg (rat)

548-62-9 C.I. Basic Violet 3

Oral	LD50	96 mg/kg (mou)
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67-63-0 isopropanol

Oral	LD50	5045 mg/kg (rat)
Dermal	LD50	12800 mg/kg (rab)

67-56-1 methanol

Oral	LD50	5628 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** *Irritant to skin and mucous membranes.*
- **on the eye:** *Irritating effect.*
- **Sensitization:** *No sensitizing effects known.*
- **Subacute to chronic toxicity:** *Target organs: thyroid, kidney, ureter or bladder tumors.*
- **Additional toxicological information:**
Irritant

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The product shows the following dangers according to internally approved calculation methods for preparations:

12 Ecological information:

- **Ecotoxicological effects:**
- **Aquatic toxicity:**
This material is not expected to be toxic to aquatic life. The LC50/96-hour values for fish are greater than 100 mg/l
- **Other information:**
The ecological effects have not been thoroughly investigated, but currently none have been identified.
- **General notes:** Water hazard class 2 (Self-assessment): hazardous for water.

13 Disposal considerations

- **Product:**
- **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:** -

15 Regulations

- **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

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· TSCA (Toxic Substances Control Act)

67-63-0	isopropanol
67-56-1	methanol
64-17-5	ethanol
548-62-9	C.I. Basic Violet 3

· 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
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· Carcinogenicity categories

· IARC (International Agency for Research on Cancer)

67-63-0	isopropanol	3
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· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

64-17-5	ethanol	A4
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· Product related hazard information:

The product has been classified and marked in accordance with regulations on hazardous materials.

· Hazard symbols:

Xn Harmful

· Hazard-determining components of labeling:

ethanol
methanol
isopropanol
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

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· *National regulations*

· *Technical instructions (air):*

Class	Share in %
III	9.8

· **Water hazard class:** *Water hazard class 2 (Self-assessment): hazardous for water.*

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*