



Printing date 08/03/2004

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
- Emergency department: Technical Services
- In case of a chemical emergency: spill, fire, exposure, or accident contact BD Diagnostic Systems at (410) 771-0100 or (800) 638-8663, or ChemTree 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 crystal violet	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.
- NTPA ratings (scale 0-4)

2

0

0

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:

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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 360 mg/m ³ , 200 ppm	
REL Short-term value: 325 mg/m ³ , 230 ppm	
Long-term value: 260 mg/m ³ , 200 ppm	
Skin	
TLV Short-term value: 328 mg/m ³ , 230 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/Softening range:	Not determined
Boiling point/Boiling range:	Not determined

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Flash point:	Not applicable
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
pH-value:	Not applicable
Solvent content:	9.8 %
Organic solvents:	

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 (NOx)
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 (AQU)
	7060 mg/kg (rat)
548-62-9 crystal violet	
Oral	LD50 96 mg/kg (mouse)
67-63-0 isopropanol	
Oral	LD50 5045 mg/kg (rat)
Dermal	LD50 12800 mg/kg (rat)
67-56-1 methanol	
Oral	LD50 5628 mg/kg (rat)

Primary irritant effect:

- on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.
- Sensitization: No sensitizing effect known.
- Substance 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:

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Irritant

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12 Ecological information:

- Ecotoxicological effects:
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), state and local requirements.
This product is not considered a RCRA hazardous waste.
- Uncleaned packaging:
Recommendation
Recommended decontaminating 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:

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. However, if a Hazard Class Number is listed the product is regulated.

15 Regulations

- SARA Section 355 (extremely hazardous substances)
None of the ingredients is listed.

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• SARA Section 313 (specific toxic chemical listings)

67-63-0	isopropanol
67-56-1	methanol
• TSCA (Toxic Substances Control Act)	
67-63-0	isopropanol
67-56-1	methanol
64-17-5	ethanol
548-62-9	crystal violet
• California Proposition 65 - Chemicals known to cause cancer	
None of the ingredients is listed.	
• California Proposition 65 - Chemicals known to cause reproductive toxicity	
None of the ingredients is listed.	
• Carcinogenicity categories	
• IARC (International Agency for Research on Cancer)	
67-63-0	isopropanol
3	
• NTP (National Toxicology Program)	
None of the ingredients is listed.	
• TLP (Threshold Limit Value established by ACGIH)	
64-17-5	ethanol
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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
crystal violet

• 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 (at):

Class	Share in %
III	9,8

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

16 Other information:

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· Department testing MSDS: Safety and Environment Department

· Contact: Technical Service Representative

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