

**Gram Stain, Crystal Violet (Working Solution)****1. Identification****Product Name:** Gram Stain, Crystal Violet (Working Solution) **Item #:** MA0103009 **Web SDS:** S274**Synonyms:** None**Recommended Use:** Laboratory Reagent, Stain**Manufacturer:**BBC Biochemical  
409 Eleanor Lane,  
Mount Vernon, WA 98273  
1-800-635-4477**Restrictions on Use:** Any use other than recommended**In Case of Emergency:**Chemtec US 1-800-424-9300  
Chemtec International 703-527-3887**2. Hazards Identification****OSHA Hazard Classification(s):**Skin Irritation - Category 2  
Eye Irritation - Category 2A  
Specific Target Organ Toxicity (single exposure) - Category 1  
Specific Target Organ Toxicity (repeated exposure) - Category 2  
Toxic to Reproduction - Category 2**Signal Word:** Danger**Hazard Statement(s):** Causes skin irritation and serious eye irritation. May cause damage to organs (respiratory system). Causes damage to organs (respiratory system, central nervous system, liver, blood) by inhalation through prolonged or repeated exposure. Suspected of damaging fertility of the unborn child.**Pictogram(s):****Precautionary Statement(s):** Prevention: Wash body thoroughly after handling. Wear approved protective gloves made of neoprene, nitrile or equivalent. Wear protective clothing, eye protection and face protection. Do not breathe vapors. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Response: If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If exposed: Call a doctor. Get medical advice/attention if you feel unwell. Storage: Store locked up. Store in a well-ventilated place. Keep cool. Disposal: Dispose of contents in accordance with local regulations.**Descriptions of Hazards not otherwise classified:** N/A**Percent of mixture with unknown acute toxicity:** N/A**3. Composition and Information on Ingredients**

Chemical Name	Common Name	CAS #	Concentration %
Ethyl Alcohol	Ethanol	64-17-5	Trade Secret
Crystal Violet		548-62-9	Trade Secret
Water		7732-18-5	Trade Secret
Ammonium Oxalate		6009-70-7	Trade Secret

**4. First Aid Measures****Eye Contact:** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.**Skin Contact:** If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.**Inhalation:** Vapor harmful. Remove to fresh air; give artificial respiration if breathing has stopped. Get medical advice/attention if you feel unwell.



# Safety Data Sheet

## Gram Stain, Crystal Violet (Working Solution)

**Ingestion:** Poison. May be fatal or cause blindness if swallowed. Cannot be made nonpoisonous. Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.

**Symptoms:** Irritation eyes, nose, throat; headache, dizziness, lassitude (weakness, exhaustion), narcosis; cough; liver damage; anemia; reproductive, teratogenic effects

**Recommendations for immediate medical care/special treatment:** Get medical advice/attention if you feel unwell.

### 5. Fire- Fighting Measures

**Extinguishing Media:** Dry chemical, carbon dioxide, alcohol foam. Use water spray to cool fire-exposed containers and disperse vapors.

**Fire Hazards (Chemical):** Not flammable.

**Special Protective Equipment:** Fire fighters should use self-contained breathing apparatus and protective clothing.

**Precautions for Firefighters:** Carbon monoxide and unidentified organic compounds may be formed during combustion.

### 6. Accidental Release Measures

**Emergency Procedures:** Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate all sources of ignition and provide ventilation.

**Protective Equipment:** See section 8

**Environmental Precautions:** Prevent release to the environment by using barriers.

**Containment and Clean-Up Procedures:** Use barriers to prevent spreading. Collect spill in container. Call waste authorities.

### 7. Handling and Storage

**Handling:** Do not breathe vapors. Do not eat, drink or smoke when using this product. Keep away from heat, sparks, open flames, hot surfaces. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

**Storage:** Store locked up. Store in a well-ventilated place. Keep cool.

### 8. Exposure Controls/Personal Protection

**OSHA Permissible Exposure Limits (PELs):**

Reagent	CAS #	OSHA PEL TWA
Ethyl Alcohol	64-17-5	1000ppm
Isopropyl Alcohol	67-63-0	400ppm
Methyl Alcohol	67-56-1	200ppm

**ACGIH Threshold Limit Values (TLVs):**

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
Ethyl Alcohol	64-17-5	1000ppm	
Isopropyl Alcohol	67-63-0	400ppm	
Methyl Alcohol	67-56-1	200ppm	

**Engineering Controls:** Use in a well ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.

**Personal Protective Measures:** Wear gloves, lab coat, eye protection and impervious footwear. Contact lenses should not be worn when working with this material.

**Special PPE Requirements:** If ventilation hood not available wear respirator.

### 9. Physical and Chemical Properties Section

**Appearance:** Violet, Violet Liquid

**Molecular Weight:** N/A

**Molecular Formula:** N/A



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**pH:** N/A  
**Boiling Point and Boiling Range:** N/A  
**Melting Point/Freezing Point:** N/A  
**Flash Point:** N/A  
**Specific Gravity/Relative Density:** N/A  
**Odor:** Vinous  
**Odor Threshold:** N/A  
**Color:** Violet  
**Flammability (solid/gas):** N/A  
**Vapor Density:** N/A  
**Upper/Lower flammability or explosive limits:** N/A  
**Vapor Pressure:** N/A  
**Evaporation Rate:** N/A  
**Partition Coefficient: n-octanol/water:** N/A  
**Viscosity:** N/A  
**Auto-ignition temperature:** N/A  
**Solubility:** Miscible in water  
**Decomposition Temperature:** N/A

### 10. Stability and Reactivity

**Reactivity:** N/A  
**Chemical Stability:** Stable  
**Conditions of Stability/Instability:** Exposure to heat releases flammable vapors  
**Stabilizers needed:** None  
**Safety issue indicated by appearance change:** N/A  
**Other:** N/A  
**Hazardous Reactions:** N/A  
**Hazardous Polymerization:** Does not occur  
**Conditions to avoid:** Open flame, heat sources  
**Classes of Incompatible Materials:** Strong Acids, Strong Bases, Strong oxidizers, potassium dioxide, bromine pentafluoride, acetyl bromide, acetyl chloride, platinum, sodium  
**Hazardous Decomposition Products:** Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors (I.e. Carbon monoxide) may be released in a fire.

### 11. Toxicological Information

#### Likely Routes of Exposure

**Eyes:** Irritation.  
**Skin:** Irritation.  
**Inhalation:** Dizziness, headache, nausea, narcosis  
**Ingestion:** N/A

**Signs or Symptoms of Exposure:** Nausea, irritation eyes, skin, nose; headache, drowsiness, lassitude (weakness, exhaustion), narcosis; cough; liver damage; anemia; reproductive, teratogenic effects  
**Effects from short term exposure (delayed, immediate, chronic):** May cause blindness, nausea, damage to gastrointestinal tract, liver, kidneys and cardiovascular system  
**Acute Toxicity (Numerical Measures):** N/A  
**Carcinogenicity (NTP, IARC, OSHA):** Not listed as a carcinogen

### 12. Ecological Information

**Ecotoxicity:** N/A



## Gram Stain, Crystal Violet (Working Solution)

**Persistence and degradability:** N/A

**Bioaccumulation Potential (octanol-water partition coefficient, BCF):** N/A

**Mobility in the soil:** N/A

**Adverse Environmental Effects:** N/A

### 13. Disposal Considerations

**Recommended Disposal Containers:** Check with your local waste authorities\*

**Recommended Disposal Methods:** Do not dispose of in drains, check with your local waste authorities.\*

**Physical/Chemical Properties affecting Disposal:** See section 2 and section 9 applicable information.\*

**Special Precautions for Landfill and Incineration Activities:** Check with your local waste authorities.\*

**Waste Stream:** Consult your local or regional authorities.\*

### 14. Transport Information

**UN Number:** UN1170

**UN Proper Shipping Name:** Alcohols, n.o.s. (ethanol, isopropanol)

**Transport Hazard Class(es):** 3

**Packing Group Number:** III

**Environmental Hazards (IMDG code):**

**Marine Pollutant:** No

**Transport in Bulk (IBC Code):** N/A

**Special Transport Precautions:** N/A

### 15. Regulatory Information

**OSHA:** N/A

**DOT:** N/A

**EPA:** N/A

**CPSC:** N/A



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## Gram Stain, Crystal Violet (Working Solution)

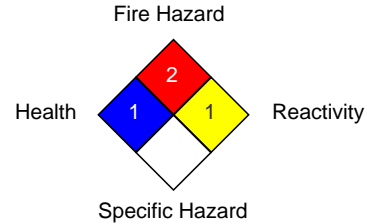
### 16. Other Information

Revision Date: 04/21/2015

#### NFPA

Health	1
Fire Hazard	2
Reactivity	1
Specific Hazard	

National Fire Protection Association (USA) NFPA



#### HMIS

Health	1
Flammability	2
Physical Hazard	1
Personal Protection	

Hazardous Material Information System HMIS

Health	1
Flammability	2
Physical Hazard	1
Personal Protection	

#### Notice to Reader:

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