

## SECTION 1: Identification

### 1.1. Identification

Product form : Mixture  
 Product name : Gram Stain, Crystal Violet  
 Product code : 6251, 6928-G, 6060A, 6501, 6251-08, 6251-16

### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : For laboratory and manufacturing use only.  
 Recommended use : Laboratory chemicals  
 Restrictions on use : Not for food, drug or household use

### 1.3. Supplier

Astral Diagnostics Inc.  
 Logan Township NJ 08085 - United States  
 T +1 856 224 0900  
 800-441-0366 Technical Service; Monday-Friday: 8:00AM-5:00 PM, Eastern US Time  
 www.ethosbiosciences.com

### 1.4. Emergency telephone number

Emergency number : 800-424-9300 CHEMTREC (USA) -- 24 Hours/Day, 7 Days/Week

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

#### GHS-US classification

Flammable liquids Category 2	H225	Highly flammable liquid and vapor
Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Skin Corrosion Category 1B	H314	Causes severe skin burns and eye damage
Mutagenicity Category 2	H341	Suspected of causing genetic defects
Serious eye damage/eye irritation Category 2A	H350	Causes serious eye irritation
Carcinogenicity Category 1A	H361	May cause cancer
Reproductive toxicity Category 2	H370	Suspected of damaging fertility or the unborn child
Specific target organ toxicity (single exposure) Category 1	H402	Causes damage to organs (central nervous system, optic nerve)
Hazardous to the aquatic environment - Acute Hazard Category 3	H412	Harmful to aquatic life
Hazardous to the aquatic environment - Chronic Hazard Category 3		Harmful to aquatic life with long lasting effects

Full text of H statements : see section 16

### 2.2. GHS Label elements, including precautionary statements

#### GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H225 - Highly flammable liquid and vapor  
 H302 - Harmful if swallowed  
 H319 - Causes serious eye irritation  
 H350 - May cause cancer  
 H361 - Suspected of damaging fertility or the unborn child  
 H370 - Causes damage to organs (central nervous system, optic nerve)  
 H412 - Harmful to aquatic life with long lasting effects

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Precautionary statements (GHS-US) :

- P201 - Obtain special instructions before use.
- P203 - Obtain, read and follow all safety instructions before use.
- P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking.
- P233 - Keep container tightly closed.
- P240 - Ground/bond container and receiving equipment.
- P241 - Use explosion-proof electrical, ventilating, lighting equipment
- P242 - Use only non-sparking tools.
- P243 - Take precautionary measures against static discharge.
- P260 - Do not breathe vapors, mist, spray.
- P264 - Wash exposed skin thoroughly after handling.
- P270 - Do not eat, drink or smoke when using this product.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves, protective clothing, eye protection, face protection.
- P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P313 - IF exposed or concerned: Get medical advice/attention.
- P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO<sub>2</sub>) to extinguish
- P403+P235 - Store in a well-ventilated place. Keep cool.
- P405 - Store locked up.
- P501 - Dispose of contents/container to comply with local, state and federal regulations
- P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

### 2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : None under normal conditions.

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Ethanol	(CAS-No.) 64-17-5	11	Flam. Liq. 2, H225; Carc. 1A, H350; Repr. 2, H361;
Methanol	(CAS-No.) 67-56-1	<1	Flam. Liq. 2, H225; Acute Tox. 3 (Oral), H301; Acute Tox. 3 (Dermal), H311; Acute Tox. 3 (Inhalation), H331; STOT SE 1, H370
Phenol	(CAS-No.) 67-63-0	<0.5	Skin Corr. 1B H314, Muta. 2, H341; Eye Dam. 1, H318 Acute Tox. 3 (Oral), H301; Acute Tox. 3 (Dermal), H311 ; Acute Tox. 3 (Inhalation), H331; STOT RE 2, H370
Crystal Violet	(CAS-No.) 548-62-9	<1	Acute Tox. 4 (Oral), H302 ;Eye Dam. 1, H318 Carc. 2, H351; Aquatic Acute 1, H400; Aquatic Chronic 1, H410
Water	(CAS-No.) 7732-18-5	Balance	Not classified

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.

First-aid measures after eye contact : 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.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician if you feel unwell.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Suspected of damaging fertility or the unborn child. Causes damage to organs.

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Symptoms/effects after inhalation	: May cause drowsiness or dizziness. May cause cancer by inhalation.
Symptoms/effects after skin contact	: May stain the skin.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. Blindness. Central nervous system depression.

### 4.3. Immediate medical attention and special treatment, if necessary

Obtain medical assistance.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Specific hazards arising from the chemical

Fire hazard	: Highly flammable liquid and vapor.
Explosion hazard	: May form flammable/explosive vapor-air mixture.

### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.
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#### 6.1.1. For non-emergency personnel

Protective equipment	: Safety glasses. Protective clothing. Gloves. Face-shield.
Emergency procedures	: Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection. Avoid breathing mist, spray.
Emergency procedures	: Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
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### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed	: Handle empty containers with care because residual vapors are flammable.
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No naked lights. No smoking. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe the mist, vapors, spray.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash exposed skin thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/... equipment.
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : incompatible materials, Heat sources, Ignition sources. Keep in fireproof place. Keep container tightly closed.
Incompatible products	: Strong bases. Strong oxidizers.

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Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<b>Crystal Violet (548-62-9)</b>		
Not applicable		
<b>Ethanol (64-17-5)</b>		
ACGIH	ACGIH STEL (ppm)	1000 ppm
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
IDLH	US IDLH (ppm)	3300 ppm
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
<b>Methanol (67-56-1)</b>		
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	ACGIH STEL (ppm)	250 ppm
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	260 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	200 ppm
IDLH	US IDLH (ppm)	6000 ppm
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	250 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (ppm)	200 ppm
NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	325 mg/m <sup>3</sup>
NIOSH	NIOSH REL (STEL) (ppm)	250 ppm
NIOSH	Remark (NIOSH)	Skin
<b>Phenol (108-95-2) -- solid form</b>		
ACGIH	ACGIH TWA (ppm)	5 ppm
ACGIH	Remark (ACGIH)	Skin
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	5 ppm
IDLH	US IDLH (ppm)	250 ppm
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (ppm)	5 ppm
NIOSH	NIOSH REL C (mg/m <sup>3</sup> )	60 mg/m <sup>3</sup> -- 15 min
NIOSH	NIOSH REL C (ppm)	15.6 ppm -- 15 min

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Material should be handled in a laboratory hood whenever possible.

#### 8.3. Individual protection measures/Personal protective equipment

##### Personal protective equipment:

Gloves. Safety glasses.



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### Hand protection:

Wear protective gloves.

### Eye protection:

Chemical goggles or safety glasses

### Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

### Other information:

Do not eat, drink, or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	:Liquid
Color	:Purple
Odor	:Alcohol odor
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Highly flammable liquid and vapor.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

### 10.5. Incompatible materials

Strong oxidizers. Strong bases.

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### 10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. May release flammable gases.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Likely routes of exposure : Inhalation; Skin and eye contact  
Acute toxicity : Not classified

Gram Stain Crystal Violet	
ATE US (oral)	1941.748 mg/kg body weight
Crystal Violet (548-62-9)	
ATE US (oral)	500 mg/kg body weight
Ethanol (64-17-5)	
LD50 oral rat	10740 mg/kg (Rat; Experimental value,Rat; Experimental value)
LD50 dermal rabbit	> 16000 mg/kg (Rabbit, Literature study)
LC50 inhalation rat (mg/l)	117 - 125 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male/female, Experimental value)
ATE US (oral)	10740 mg/kg body weight
Methanol (67-56-1)	
LD50 oral rat	1187 - 2769 mg/kg body weight (BASF test, Rat, Male/female, Weight of evidence)
LD50 dermal rabbit	17100 mg/kg (Rabbit, Inconclusive, insufficient data)
LC50 inhalation rat (mg/l)	128.2 mg/l air (BASF test, 4 h, Rat, Male/female, Weight of evidence)
ATE US (oral)	100 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h
Phenol (108-95-2) -- solid form	
LD50 oral rat	650 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value)
LD50 dermal rat	660 mg/kg (Equivalent or similar to OECD 402, 24 h, Rat, Experimental value)
LC50 inhalation rat (ppm)	6.32 mg/l/4h (for a 5% w/v aqueous solution)
ATE US (oral)	650 mg/kg body weight
ATE US (dermal)	660 mg/kg body weight
STOT - repeated exposure	May cause damage to organs (liver, kidneys) through prolonged or repeated exposure.

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Causes serious eye irritation.  
Respiratory or skin sensitization : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : May cause cancer.

Reproductive toxicity : Suspected of damaging fertility or the unborn child.  
Specific target organ toxicity – single exposure : Causes damage to organs (central nervous system, optic nerve).

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met. Harmful if swallowed.

Symptoms/effects after inhalation : May cause drowsiness or dizziness. May cause cancer by inhalation.

Symptoms/effects after skin contact : May stain the skin.

Symptoms/effects after eye contact : Causes serious eye irritation.

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Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard. Blindness. Central nervous system depression.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - water : Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

<b>Crystal Violet (548-62-9)</b>	
EC50 Daphnia 1	0.24 - 5 mg/l 48 hr.
EC50 other aquatic organisms 1	0.025 - 0.8 72 hr., <i>Pseudokirchneriella subcapitata</i>
<b>Ethanol (64-17-5)</b>	
LC50 fish 1	14200 mg/l (US EPA, 96 h, <i>Pimephales promelas</i> , Flow-through system, Fresh water, Experimental value)
<b>Methanol (67-56-1)</b>	
LC50 fish 1	15400 mg/l (EPA 660/3 - 75/009, 96 h, <i>Lepomis macrochirus</i> , Flow-through system, Fresh water, Experimental value)
EC50 Daphnia 1	18260 mg/l (OECD 202: <i>Daphnia</i> sp. Acute Immobilisation Test, 96 h, <i>Daphnia magna</i> , Semi-static system, Fresh water, Experimental value)
ErC50 (algae)	22000 mg/l (OECD 201: Alga, Growth Inhibition Test, 96 h, <i>Pseudokirchneriella subcapitata</i> , Static system, Fresh water, Experimental value)
<b>Phenol (108-95-2) -- solid form</b>	
LC50 fish 1	8.9 mg/l (US EPA, 96 h, <i>Oncorhynchus mykiss</i> , Flow-through system, Fresh water, Experimental value)

#### 12.2. Persistence and degradability

<b>Crystal Violet (548-62-9)</b>	
Persistence and degradability	Not established.
<b>Ethanol (64-17-5)</b>	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.8-0.967 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.7 g O <sub>2</sub> /g substance
ThOD	2.1 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.43
<b>Methanol (67-56-1)</b>	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.6-1.12 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.42 g O <sub>2</sub> /g substance
ThOD	1.5 g O <sub>2</sub> /g substance
<b>Phenol (108-95-2) -- solid form</b>	
Persistence and degradability	Biodegradable in the soil. Inhibits biodegradation processes in the soil. Readily biodegradable in water. Readily biodegradable in water in anaerobic conditions.
Biochemical oxygen demand (BOD)	1.68 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.28 g O <sub>2</sub> /g substance
ThOD	2.38 g O <sub>2</sub> /g substance

#### 12.3. Bioaccumulative potential

<b>Gram Stain Crystal Violet</b>	
Bioaccumulative potential	Not established.
<b>Crystal Violet (548-62-9)</b>	
Log Pow	1.172
Bioaccumulative potential	Not established.

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<b>Ethanol (64-17-5)</b>	
BCF fish 1	1 (Other, 72 h, Cyprinus carpio, Static system, Fresh water, Read-across)
Log Pow	-0.31 (Experimental value)
Bioaccumulative potential	Not bioaccumulative.
<b>Methanol (67-56-1)</b>	
BCF fish 1	1 - 4.5 (72 h, Cyprinus carpio, Static system, Fresh water, Experimental value)
Log Pow	-0.77 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>Phenol (108-95-2) -- solid form</b>	
BCF fish 1	17.5 (OECD 305: Bioconcentration: Flow-Through Fish Test, 3 h, Danio rerio, Flow-through system, Fresh water, Experimental value, Fresh weight)
Log Pow	1.47 (Experimental value, Equivalent or similar to OECD 117, 30 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

### 12.4. Mobility in soil

<b>Ethanol (64-17-5)</b>	
Surface tension	0.022 N/m (20 °C)
Ecology - soil	Highly mobile in soil.
<b>Methanol (67-56-1)</b>	
Surface tension	0.023 N/m (20 °C)
Log Koc	-0.89 - -0.21 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.
<b>Phenol (108-95-2) -- solid form</b>	
Surface tension	71.3 mN/m (20 °C, 0.118 %)
Log Koc	1.15 – 1.86 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with local, state and federal regulations.

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1170 Ethanol solutions, 3, II

UN-No.(DOT) : UN1170

Proper Shipping Name (DOT) : Ethanol solutions

Transport hazard class(es) (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : II - Medium Danger

Hazard labels (DOT) : 3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx) : 202

DOT Packaging Bulk (49 CFR 173.xxx) : 242



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DOT Special Provisions (49 CFR 172.102)	: 24 - Alcoholic beverages containing more than 70 percent alcohol by volume must be transported as materials in Packing Group II. Alcoholic beverages containing more than 24 percent but not more than 70 percent alcohol by volume must be transported as materials in Packing Group III. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.  T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 4b;150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
Other information	: No supplementary information available.

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

Gram Stain Crystal Violet	
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard

All components of this product are listed on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Methanol	CAS-No. 67-56-1	5% threshold
Phenol	CAS-No. 108-95-2	1% threshold

Crystal Violet (548-62-9)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
Methanol (67-56-1)	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb
SARA Section 311/312 Hazard Classes	Physical hazard - Flammable (gases, aerosols, liquids, or solids) Health hazard - Acute toxicity (any route of exposure) Health hazard - Specific target organ toxicity (single or repeated exposure)
Phenol (108-95-2) -- solid form	
RQ (Reportable quantity, EPA Sec 304 List of Lists)	1000 lb
SARA Section 311/312 Hazard Classes	Health hazard - Specific target organ toxicity (single or repeated exposure) Health hazard - Germ cell mutagenicity Health hazard - Acute toxicity (any route of exposure) Health hazard - Serious eye damage or eye irritation Health hazard - Skin corrosion or Irritation
Clean Water Act (40 CFR 122.21, 40 CFR 122.42)	Toxic Pollutants, Hazardous Substances, Priority Pollutants: RQ = 1000 lb
CERCLA (40 CFR 302)	Hazardous Substances, CERCLA RQ = 1000 lb/454 kg

#### 15.2. International regulations

##### CANADA

Crystal Violet (548-62-9)	
Listed on the Canadian DSL (Domestic Substances List)	
Ethanol (64-17-5)	
Listed on the Canadian DSL (Domestic Substances List)	
Methanol (67-56-1)	
Listed on the Canadian DSL (Domestic Substances List)	
Phenol (108-95-2)	
Listed on the Canadian DSL (Domestic Substances List)	

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### Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

### National regulations

#### Crystal Violet (548-62-9)

Listed on the Canadian IDL (Ingredient Disclosure List)

#### Ethanol (64-17-5)

Listed on IARC (International Agency for Research on Cancer)

**EU-Regulations** No additional information available

### 15.3. US State regulations

This product can expose you to Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more info go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

#### Methanol (67-56-1)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	Yes	No	No	

#### Phenol (108-95-2)

U.S. - California - Proposition 65	U.S. - New Jersey Right to Know	U.S. - Massachusetts Right to Know	U.S. - Pennsylvania Right to Know
No	Yes	Yes	Yes

## SECTION 16: Other information

Initial Date : 11 DEC 2013

Revision date : 02 NOV 2022

Full text of H-phrases:

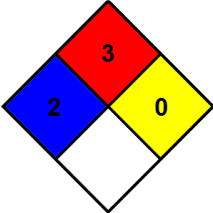
H301	Highly flammable liquid and vapor
H302	Toxic if swallowed
H311	Harmful if swallowed
H318	Toxic in contact with skin
H319	Causes serious eye damage
H331	Causes serious eye irritation
H335	Toxic if inhaled
H350	May cause respiratory irritation
H351	May cause cancer
H361	Suspected of causing cancer
H370	Suspected of damaging fertility or the unborn child
H400	Causes damage to organs
H402	Very toxic to aquatic life
H410	Harmful to aquatic life
H412	Very toxic to aquatic life with long lasting effects
	Harmful to aquatic life with long lasting effects

# Gram Stain, Crystal Violet

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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NFPA health hazard	: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.	
NFPA fire hazard	: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.	
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.	
Hazard Rating		
Health	: 2 Moderate Hazard - Temporary or minor injury may occur	
Flammability	: 3 Serious Hazard - Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73 F and boiling points above 100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB & IC)	
Physical	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.	
Personal protection	: H H - Splash goggles, Gloves, Synthetic apron, Vapor respirator	

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
SDS US (GHS HazCom 2012)

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