

# Safety Data Sheet

# **Crystal Violet Solution, 1%**

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Crystal Violet Solution, 1%

Synonyms/Generic Names: Basic Violet 3; Gentian Violet; Hexamethylpararosaniline chloride

**SDS Number:** 238.00

Product Use: For Educational Use Only

Manufacturer: Columbus Chemical Industries, Inc. N4335 Temkin Rd. Columbus, WI. 53925

For More Information Contact: Ward's Science 5100 West Henrietta Rd. PO Box 92912-9012 Rochester, NY 14692 (800) 962-2660 (Monday-Friday 7:30-7:00 Eastern Time)

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

#### 2. HAZARDS IDENTIFICATION

**OSHA Hazards:** Toxic by ingestion, Irritant, Carcinogen

Target Organs: None

Signal Word: Warning

**Pictograms:** 



**GHS Classification:** 

Skin irritation	Category 3
Eye irritation	Category 2A
Carcinogenicity	Category 2
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

#### GHS Label Elements, including precautionary statements:

#### **Hazard Statements:**

H316	Causes mild skin irritation.	
H319	Causes serious eye irritation.	
H351	Suspected of causing cancer.	
H411	11 Toxic to aquatic life with long lasting effects.	

#### **Precautionary Statements:**

P273	Avoid release to the environment.	
P281	Use personal protective equipment as required.	
P305+P351+P338	3 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	

#### Potential Health Effects

Eyes	Causes eye irritation.	
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.	
Skin	May be harmful if absorbed through skin. Causes skin irritation.	
Ingestion	Toxic if swallowed.	

#### **NFPA Ratings**

Health	1
Flammability	0
Reactivity	0
Specific hazard	Not Available

# HMIS RatingsHealth1Fire0Reactivity0PersonalH

# **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Crystal Violet	1	548-62-9	208-953-6	$C_{25}H_{30}CIN_3$	407.99 g/mol
Water	99	7732-18-5	231-791-2	H <sub>2</sub> O	18.00 g/mol

# 4. FIRST-AID MEASURES

Eyes	In case of eye contact, rinse with plenty of water and seek medical attention.		
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not		
	breathing, give artificial respiration. Get medical attention if necessary.		
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated		
	clothing and wash using soap. Get medical attention.		
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If		
	conscious, wash out mouth with water. Get medical attention.		

# **5. FIRE-FIGHTING MEASURES**

Suitable (and unsuitable) extinguishing media	Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water.	
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.	
Specific hazards arising from the chemical	Emits toxic fumes (carbon oxides, nitrogen oxides, hydrogen chloride gas) under fire conditions. (See also Stability and Reactivity section).	

# 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

Methods and materials for containment and cleaning up

Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

# 7. HANDLING AND STORAGE

#### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

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

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Contains no substances with occupational exposure limit values.

#### **Personal Protection**

Eyes	Wear chemical safety glasses or goggles.	
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an	
	approved respirator.	
Skin	Wear nitrile or rubber gloves, and apron or lab coat.	
Other	Not Available	

#### Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Opaque, purple liquid.
Odor	Not Available
Odor threshold	Not Available
рН	Not Available
Melting point/freezing point	Not Available
Initial boiling point and boiling range	Not Available
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	Not Available
Vapor density	Not Available
Density	1.00 (water = 1)
Solubility (ies)	Not Available
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

# **10. STABILITY AND REACTIVITY**

Chemical Stability	Stable	
Possibility of Hazardous Reactions	Will not occur.	
Conditions to Avoid Not Available		
Incompatible Materials Strong oxidizing agents.		
Hazardous Decomposition Products Carbon oxides, nitrogen oxides, hydrogen chloride gas.		

# **11. TOXICOLOGICAL INFORMATION**

#### Acute Toxicity

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	Not Available

#### Carcinogenicity

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IARC	No components of this product present at levels greater than or equal to 0.1% is identified
	as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified
	as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified
	as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified
	as a carcinogen or potential carcinogen by OSHA.

\*Limited evidence of a carcinogenic effect.

#### Signs & Symptoms of Exposure

Skin	Irritation, redness.
Eyes	Irritation, redness, watering eyes.
Respiratory	Irritation, coughing.
Ingestion	Irritation, nausea, vomiting, diarrhea.

Chronic Toxicity	May cause cancer based on animal test data.	
Teratogenicity	May cause adverse reproductive effects and birth defects based on	
	animal test data.	
Mutagenicity	May affect genetic material.	
Embryotoxicity	Not Available	
Specific Target Organ Toxicity	Not Available	
Reproductive Toxicity	Not Available	
Respiratory/Skin Sensitization	Not Available	

# **12. ECOLOGICAL INFORMATION**

Ecotoxicity		
Aquatic Vertebrate	Not Available	
Aquatic Invertebrate	Not Available	
Terrestrial	Not Available	

Persistence and Degradability	Not Available
<b>Bioaccumulative Potential</b>	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Very toxic to aquatic life with long lasting effects.

# **13. DISPOSAL CONSIDERATIONS**

Waste Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residues.
Product Containers	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary
	before disposing of waste product containers.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

### 14. TRANSPORTATION INFORMATION

US DOT	Not Dangerous Goods
TDG	Not Dangerous Goods
IMDG	Not Dangerous Goods
Marine Pollutant	No
IATA/ICAO	Not Dangerous Goods

# **15. REGULATORY INFORMATION**

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Crystal Violet
SARA 312	Crystal Violet
SARA 313	Not Listed
WHMIS Canada	Not Listed

### **16. OTHER INFORMATION**

Revision	Date
Revision 1	01/07/2013

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