## **Crystal Violet**



## Section 1 Product Description

Product Name: Crystal Violet

**Recommended Use:** Science education applications

Synonyms: Basic Violet 3, CI 42555, Gentian Violet, Aniline Violet, Methanaminium, N-(4-(bis(4-

(dimethylamino)phenyl)methylene)-2,5-cyclohexadien- 1-ylidene)-N-methyl-, Chloride

, Hexamethyl-P-rosaniline Chloride

**Distributor:** Carolina Biological Supply Company

2700 York Road, Burlington, NC 27215

1-800-227-1150

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)

Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

#### Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**DANGER** 











Toxic if swallowed. Causes skin irritation. Causes serious eye damage. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Very toxic to aquatic life.

#### **GHS Classification:**

Serious Eye Damage/Eye Irritation Category 1, Hazardous to the aquatic environment - Acute Category 1, Skin Corrosion/Irritation Category 2, Carcinogenicity Category 2, Reproductive Toxicity Category 2, Acute Toxicity - Oral Category 3

Other Safety Precautions: IF exposed or concerned: Get medical advice/attention.

Acute Toxicity Dermal Contains
Acute Toxicity Inhalation Gas

100 % of the mixture consists of ingredient(s) of unknown toxicity
100 % of the mixture consists of ingredient(s) of unknown toxicity

**Contains** 

Acute Toxicity Inhalation Vapor 100 % of the mixture consists of ingredient(s) of unknown toxicity

Contains

Acute Toxicity Inhalation Dust/Mist 100 % of the mixture consists of ingredient(s) of unknown toxicity

**Contains** 

Section 3

# Composition / Information on Ingredients

 Chemical Name
 CAS #
 %

 Crystal Violet
 548-62-9
 100

## Section 4 First Aid Measures

**Emergency and First Aid Procedures** 

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

Skin Contact: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of

water.

**Ingestion:** IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

## Section 5 Firefighting Procedures

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Extinguishing Media: Use dry chemical, CO2 or appropriate foam.

Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained

breathing apparatus.

Fire and/or Explosion Hazards: Fire or excessive heat may produce hazardous decomposition products.

**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide, Nitrogen containing gases, Hydrogen chloride

#### Section 6

#### Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Collect spillage.

#### Section 7

## **Handling and Storage**

Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

> Wash thoroughly after handling. Do no eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective

equipment as required. Avoid direct sunlight and heat.

Store locked up. Keep container tightly closed in a cool, well-ventilated place. Storage:

Storage Code: Green - general chemical storage

#### Section 8 Protection Information

**ACGIH OSHA PEL** Chemical Name (TWA) (STEL) (TWA) (STEL) Crystal Violet N/A N/A N/A N/A

**Control Parameters** 

**Eve Protection:** 

**Engineering Measures:** No exposure limits exist for the constituents of this product. General room ventilation

might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

**Respiratory Protection:** 

No respiratory protection required under normal conditions of use. Provide general room

exhaust ventilation if symptoms of overexposure occur as explained Section 11. A

respirator is not normally required.

None required where adequate ventilation is provided. If airborne concentrations are Respirator Type(s):

above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection. Wear chemical splash goggles when handling this product. Have an eye wash station

available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective

equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving

work.

Gloves: Butyl rubber, Neoprene, Nitrile, Polyvinyl chloride

#### Section 9

#### Physical Data

Formula: C25H30N3CI Molecular Weight: 407.97 Appearance: Metallic Green Solid

Odor: No data available

Odor Threshold: No data available

**pH:** No data available

Melting Point: No data available Boiling Point: No data available Flash Point: No data available

Flammable Limits in Air: No data available

Vapor Pressure: No data available

Evaporation Rate (BuAc=1): No data available Vapor Density (Air=1): No data available Specific Gravity: o data available Solubility in Water: Soluble

Log Pow (calculated): 0.51

Autoignition Temperature: No data available

**Decomposition Temperature: 215 C** 

Viscosity: No data available

Percent Volatile by Volume: No data available

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**Section 10 Reactivity Data** 

Reactivity: Not generally reactive under normal conditions.

**Chemical Stability:** Stable under normal conditions.

**Conditions to Avoid:** Elevated temperatures **Incompatible Materials:** Strong oxidizing agents

**Hazardous Decomposition Products:** Hydrogen chloride, Nitrogen containing gases, Carbon dioxide, Carbon monoxide

**Hazardous Polymerization:** Will not occur

Section 11 Toxicity Data

**Routes of Entry** Inhalation, Ingestion, and Skin contact. Symptoms (Acute): Cardiovascular system, Respiratory disorders

**Delayed Effects:** No data available

**Acute Toxicity:** 

**Chemical Name CAS Number** Oral LD50 **Dermal LD50** Inhalation LC50 Crystal Violet 548-62-9 Oral LD50 Rabbit Not determined Not determined

> 150 mg/kg Oral LD50 Mouse

96 mg/kg

Carcinogenicity:

**Chemical Name CAS Number IARC** NTP **OSHA** Crystal Violet 548-62-9 Not listed Not listed Not listed

**Chronic Effects:** 

Mutagenicity: No evidence of a mutagenic effect.

Teratogenicity: Evidence of a teratogenic effect (birth defect).

No evidence of a sensitization effect. Sensitization:

Reproductive: Evidence of negative effects on the unborn fetus.

**Target Organ Effects:** 

Acute: Cardiovascular system, Respiratory system

**Chronic:** No data available

Section 12 Ecological Data

Overview: Severe ecological hazard. This product may be toxic to plants and/or wildlife.

Mobility: This material is expected to have essentially no mobility in soil. It absorbs strongly to most soil

types.

Adsorbs to soil. Persistence:

**Bioaccumulation:** Bioconcentration may occur. Degradability: Biodegrades quickly.

Other Adverse Effects: No data

**Chemical Name CAS Number Eco Toxicity** 

Crystal Violet 548-62-9

Section 13 Disposal Information

Dispose in accordance with all applicable Federal, State and Local regulations. Always **Disposal Methods:** 

contact a permitted waste disposer (TSD) to assure compliance.

Waste Disposal Code(s): Not Determined

Section 14 Transport Information

**Ground - DOT Proper Shipping Name:** Air - IATA Proper Shipping Name: Not regulated for air transport by IATA. Not regulated for transport by US DOT.

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Section 15		Regulatory Information				
TSCA Status:	All components in this product are on the TSCA Inventory.					
Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Crystal Violet	548-62-9	No	No	No	No	No

# Section 16 Additional Information

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary			
ACGIH	American Conference of Governmental	NTP	National Toxicology Program
	Industrial Hygienists	OSHA	Occupational Safety and Health Administration
CAS	Chemical Abstract Service Number	PEL	Permissible Exposure Limit
CERCLA	Comprehensive Environmental Response,	ppm	Parts per million
	Compensation, and Liability Act	RCRA	Resource Conservation and Recovery Act
DOT	U.S. Department of Transportation	SARA	Superfund Amendments and Reauthorization Act
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
N/A	Not Available	TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

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