



LABORATORY CHEMICALS AND CONSUMABLES
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MATERIAL SAFETY DATA SHEET

CRYSTAL VIOLET

1. Chemical Product and Company information.

Product name: Crystal Violet

Contact Information:

Radchem cc
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2. Hazard Identification

Hazardous in case of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

3. Composition / information on ingredients

CAS #: 548-62-9

Synonym: Aizen Crystal Violet, Aniline Violet, Basic Violet 3, Bismuth Violet, Gentian Violet; Ammonium, (4-(bis(p-(dimethylamino)phenyl)methylene)-2,5-cyclohexadien-1-ylidene)dimethyl-,chloride; Methylrosaniline chloride; Hexamethyl pararosaniline chloride; Hexamethyl-p-rosaniline chloride

Chemical Name: Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2, 5-cyclohexadien-1-ylidene]-n-methyl, chloride

Chemical Formula: C-25-H30-Cl-N3

4. First Aid Measures

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Serious Skin Contact: Not available

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.



Serious Inhalation: Not available

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

5. Fire-fighting measures

Flammability of the Product: May be combustible at high temperature

Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances: Slightly explosive in presence of open flames and sparks. Non-explosive in presence of shocks.

Fire Fighting Media and Instructions: SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: As with most organic solids, fire is possible at elevated temperatures

Special Remarks on Explosion Hazards: Fine dust dispersed in air in sufficient concentrations, and in the presences of an ignition source is a potential dust explosion hazard.

6. Accidental release measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

7. Handling and storage

Precautions: Keep away from heat. Keep away from sources of ignition. Do not ingest. Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

8. Exposure controls/personal protection

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.



9. Physical and chemical properties

Physical state and appearance: Solid. (Powdered solid, Glistening pieces)

Odour: Characteristic (Slight)

Taste: Not available

Colour: Green (Dark)

Boiling Point: Not available

Melting Point: Decomposition temperature: 215°C

Critical Temperature: Not available

Specific Gravity: Not available

Vapour Density: Not available

Volatility: Not available

Odour Threshold: Not available

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water

Solubility: Soluble in cold water, hot water. Insoluble in diethyl ether.

10. Stability and reactivity

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, dust generation, incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents

Corrosivity: Not available

Special Remarks on Reactivity: Not available

Special Remarks on Corrosivity: Not available

Polymerization: Will not occur.

11. Toxicological information

Routes of Entry: Inhalation. Ingestion..

Toxicity to Animals: Acute oral toxicity (LD50): 96 mg/kg [Mouse].

Chronic Effects on Humans: MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.

Other Toxic Effects on Humans: Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

Special Remarks on Toxicity to Animals: Not available

Special Remarks on Chronic Effects on Humans: May affect genetic material (mutagenic). May cause adverse reproductive effects and birth defects (teratogenic) based on animal test data. May cause cancer based on animal test data.



Special Remarks on other Toxic Effects on Humans: Acute Potential Health Effects: Skin: May cause mild skin irritation. It can stain the area of contacted skin. Eyes: Causes moderate to severe irritation with immediate severe pain. Eye contact causes blepharospasm, purple staining of the cornea and conjunctiva cause permanent corneal/eye damage. Inhalation: May be harmful if inhaled. May cause upper respiratory tract and mucous membrane irritation. Ingestion: Harmful if swallowed! Causes gastrointestinal tract irritation with nausea, vomiting, hypermotility, diarrhoea, abdominal pain. May affect respiration (acute pulmonary edema), behaviour (ataxia) Severe systemic poisonings have not been repeated in humans, but animal studies have shown blood pressure rise and death from respiratory paralysis during IV administration. Chronic Potential Health Effects: Ingestion: Prolonged or repeated ingestion may cause peritonitis and may affect metabolism (weight loss).

12. Ecological information

Ecotoxicity: Not available

BOD5 and COD: Not available

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the product itself.

Special Remarks on the Products of Biodegradation: Not available.

13. Disposal considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport information

DOT Classification: Not a DOT controlled material

Identification: : Not applicable

Special Provisions for Transport: Not available

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