

# Material Safety Data Sheet

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Infosafe No. 1CH2W Issue Date : July 2005 RE-ISSUED by CHEMSUPP

Product Name : **CRYSTAL VIOLET / GENTIAN VIOLET**

Classified as hazardous according to criteria of NOHSC

## COMPANY DETAILS

**Company Name** CHEM-SUPPLY PTY LTD (ABN 19 008 264 211)  
**Address** 50 Bedford Street GILLMAN  
SA 5013 Australia  
**Tel/Fax** Tel: (08) 8440-2000 Fax: (08) 8440-2001  
**Other Information** EMERGENCY CONTACT NUMBER: +61 08 8440 2000  
Business hours: 8:30am to 5:00pm, Monday to Friday.

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## IDENTIFICATION

**Product Name** CRYSTAL VIOLET / GENTIAN VIOLET

<b>Other Names</b>	<b>Name</b>	<b>Product Code</b>
	Gentian Violet	
	CRYSTAL VIOLET LR	CL067
	C.I. 42555	
	Methyl violet 10B	
	Methyl violet 6B	
	Basic violet 3	
	Hexamethyl-p-rosaline chloride	

**UN Number** None Allocated  
**DG Class** None Allocated  
**Packing Group** None Allocated  
**Hazchem Code** None Allocated  
**Poisons Schedule** Not Scheduled  
**Product Use** Medicine (topical antibacterial and antiallergen), acid-base indicator, alcohol denaturant, biological stain, textile dye and laboratory reagent.

## Physical Data

**Appearance** Green powder or crystals.  
**Melting Point** 189 - 194 °C  
**Solubility in Water** 16 g/L @ 25 °C

## Other Properties

**pH Value** pH of 10 g/L aqueous solution: 2.5 - 3.5 @ 20 °C  
**Solubility in Organic Solvents** Soluble in chloroform. Partially soluble in alcohol and glycerol.  
**Odour** Odourless  
**Form** Solid  
**Stability** Stable.

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**Haz. Polymerization** Will not occur.  
**Materials to Avoid** Strong oxidisers.  
**Formula** C<sub>25</sub>H<sub>30</sub>N<sub>3</sub>.Cl  
**Molecular Weight** 407.99

## Ingredients

Ingredients	Name	CAS	Proportion
	Gentian Violet	548-62-9	100 %

## HEALTH HAZARD INFORMATION

### Health Effects

**Acute - Swallowed** Harmful if swallowed. May cause nausea, vomiting, diarrhea, pain, headache and dizziness. Causes damage to mucous membranes and gastrointestinal tract.  
**Acute - Eye** Irritant effect.  
**Acute - Skin** May cause irritation and stains to the skin.  
**Acute - Inhaled** Irritation symptoms in the respiratory tract.  
**Chronic** Possible risks of irreversible effects.

### First Aid

**Swallowed** Rinse mouth thoroughly with water immediately. Give plenty of water to drink. Do not induce vomiting. Seek medical attention.  
**Eye** Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Seek medical attention.  
**Skin** Wash affected areas with copious quantities of water immediately. Remove contaminated clothing and wash before re-use. Seek medical attention.  
**Inhaled** Remove victim to fresh air. Employ artificial respiration if indicated. Seek medical attention.  
**First Aid Facilities** Maintain eyewash fountain and drench facilities in work area.  
**Other Information** If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 13 1126 from anywhere in Australia.

### Advice to Doctor

**Advice to Doctor** Treat symptomatically.

### Other Health Hazard Information

**Teratogenicity** May cause adverse teratogenic effects.  
**Mutagenicity** May cause adverse mutagenic effects.  
**Carcinogenicity** Has been found to cause cancer in laboratory animals.

## PRECAUTIONS FOR USE

**Other Exposure Info.** A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by NOHSC Australia for this product. There is a blanket limit of 10 mg/m<sup>3</sup> for dusts when limits have not otherwise been established.  
**Eng. Controls** In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. Recommendation: Extraction hood.

### Personal Protection

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<b>Respirator Type (AS 1716)</b>	Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection. Recommendation: Dust respirator.
<b>Eye Protection</b>	The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336. Recommendation: Goggles or face-shield.
<b>Glove Type</b>	Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance. Recommendation: Rubber, plastic, or nitrile rubber.
<b>Clothing</b>	Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.
<b>Protective Equip.</b>	Wear plastic apron, sleeves, boots - if handling large quantities.
<b>Work/Hygienic Practices</b>	Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

## Flammability

**Fire Hazards** Combustible.

## SAFE HANDLING INFORMATION

### Storage and Transport

<b>Storage Precautions</b>	Store away from oxidizing agents. Keep away from direct sunlight and other sources of heat or ignition. Keep container tightly closed and dry. Store at room temperature (15 to 25 °C recommended).
<b>Transport</b>	Dangerous Goods of Class 6 (Toxic and Infectious Substances) are incompatible in a placard load with any of the following: Class 1, Class 3, if the Class 3 dangerous goods are nitromethane, Class 8, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids; and are incompatible with food and food packaging in any quantity.
<b>Storage Regulations</b>	Refer Australian Standard AS 4452:1997 'The storage and handling of toxic substances'.
<b>Handling</b>	Avoid substance contact and generation and inhalation of dust.

## Spills and Disposal

<b>Spills &amp; Disposal</b>	Eliminate all ignition sources (no smoking, flares, sparks or flame) within at least 15m. Do NOT touch or walk through spilled product. Do NOT touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if safe to do so. Prevent entry into waterways, drains, confined areas. Cover with plastic sheet to prevent spreading. Absorb spill with earth, sand or other non-combustible material and transfer to container. DO NOT GET WATER INSIDE CONTAINERS. SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.
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## Fire/Explosion Hazard

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<b>Fire/Explos. Hazard</b>	May burn but do not ignite readily. Containers may explode when heated. When heated, vapours may form explosive mixtures with air. Contact with metals may evolve flammable hydrogen gas. Runoff may pollute waterways. May be transported in a molten form. Fire will produce irritating, poisonous and/or corrosive gases. This product in sufficient quantity and reduced particle size is capable of creating a dust explosion.
<b>Hazardous Decomposition or Byproducts</b>	Oxides of carbon and nitrogen and hydrogen chloride gas.
<b>Fire Fighting Procedures</b>	Small fire: Use dry chemical, CO2 or water spray. Large fire: Use water spray, fog or foam - Do NOT use water jets. If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out. Avoid getting water inside the containers.
<b>Fire Fighting Precautions</b>	Wear SCBA and chemical splash suit. Fully encapsulating, gas-tight suits should be worn for maximum protection. Structural firefighter's uniform is NOT effective for these materials.
<b>Hazchem Code</b>	None Allocated

## OTHER INFORMATION

<b>Toxicology</b>	LD50 (oral, rat): 420 mg/kg.
<b>Risk Statement</b>	R20/22 Harmful by inhalation and if swallowed. R40 Possible risk of irreversible effects. R41 Risk of serious damage to eyes. R50 Very toxic to aquatic organisms. R53 May cause long term adverse effects in the aquatic environment.
<b>Safety Statement</b>	S22 Do not breathe dust. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S61 Avoid release to the environment. Refer to special instructions/safety data sheet.
<b>Hazard Category</b>	Harmful, Irritant
<b>References</b>	Commonwealth Department of Health and Aged Care, 'Standard for the Uniform Scheduling of Drugs and Poisons No. 19', Commonwealth of Australia, Canberra 2004. Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.', Rev., John Wiley & Sons, Inc., NY, 1997. National Road Transport Commission, 'Australian Dangerous Goods Code 6th. Ed.', AGPS, Canberra, 1998. South Australia Government, 'Approved Code of Practice for the Labelling of Workplace Substances', 1995. Standards Australia 'AS 1940-2004 The Storage and Handling of Flammable and Combustible Liquids. Standards Australia, 'SAA/SNZ HB 76:2004 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand, August 2004. Worksafe Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004)]', AusInfo, Canberra 2004. Worksafe Australia, 'Hazardous Substances Information System, 2005'. Worksafe Australia, 'National Code of Practice for the Labelling of Workplace Substances [NOHSC:2012(1994)]', AGPS, Canberra 1994. Worksafe Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]', AusInfo, Canberra 1995.

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**Ecological Information**  
Biologic degradation: Eliminating bar: < 10 g/g.  
Ecotoxic effects: Highly toxic for aquatic organisms. May cause long-term adverse effects in the aquatic environment.  
Fish toxicity: Salmo gairdnerii LC50: 0.7 mg/l /96 h.  
Further ecologic data: BOD5: 0.12 g/g. COD: 163.9 g/g.  
Do not allow to enter waters, waste water, or soil!

**User Codes**

	<u>User Code</u>
Risk Phrases	20/22-40-41-50-
Risk Phrases (cont)	53
Safety phrases	22-26-36/37/39-
Safety phrases	61
CAS No.	548-62-9

**Empirical Formula & Structural Formula** C<sub>25</sub>H<sub>30</sub>N<sub>3</sub>.Cl

## CONTACT POINT

**Contact**

Paul McCarthy Ph. (08) 8440 2000      **DISCLAIMER STATEMENT:**  
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