

Safety Data Sheet CRYSTAL VIOLET / GENTIAN VIOLET

SDS no. 77UAVPNG • Version 1.0 • Date of issue: 2025-03-19

SECTION 1: Identification

GHS Product identifier

Product name CRYSTAL VIOLET / GENTIAN VIOLET

Product number ADCV

Recommended use of the chemical and restrictions on use

Medicine (topical antibacterial and antiallergen), acid-base indicator, alcohol denaturant, biological stain, textile dye and laboratory reagent.

Supplier's details

Name ChemSupply Australia Pty Ltd

Address 38-50 Bedford Street

5013 Gillman South Australia

Australia

Telephone 08 8440 2000

email www.chemsupply.com.au

National contact

Name Australian Biostain Pty Ltd Address 16 Shipwright Road

5016 Largs North SA

Australia

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

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- Acute toxicity, oral, Cat. 4
- Hazardous to the aquatic environment, short-term (acute), Cat. 1
- Hazardous to the aquatic environment, long-term (chronic), Cat. 1
- Carcinogenicity, Cat. 2
- Serious eye damage/eye irritation, Cat. 1

GHS label elements, including precautionary statements

Pictograms



Signal word Danger

Hazard statement(s)

Harmful if swallowed H302 H318 Causes serious eye damage H351 Suspected of causing cancer [route] H400

Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

Precautionary statement(s)

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P264 Wash hands 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. P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/physcian if you feel unwell,

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. P310 Immediately call a POISON CENTER/doctor/physcian

P330 Rinse mouth. P391 Collect spillage. P405 Store locked up.

P501 Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight: 407.99

Components

| Component | CAS no. | Concentration |
|---|----------|-------------------|
| Crystal violet (EC no.: 208-953-6; Index no.: 612-205-00-8) | 548-62-9 | <= 100 % (weight) |
| | | |

CLASSIFICATIONS: Carcinogenicity, Cat. 1B; Acute toxicity, oral, Cat. 4; Serious eye damage/eye irritation, Cat. 1; Hazardous to the aquatic environment, short-term (acute), Cat. 1; Hazardous to the aquatic environment, long-term (chronic), Cat. 1. HAZARDS: H302 - Harmful if swallowed; H318 - Causes serious eye damage; H350 - May cause cancer [route]; H400 - Very toxic to aquatic life; H410 - Very toxic to aquatic life with long lasting effects.

SECTION 4: First-aid measures

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Description of necessary first-aid measures

General advice For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New

Zealand 0800 764 766) or a doctor (at once).

If inhaled, remove from contaminated area to fresh air immediately. Apply

artificial respiration if not breathing. If breathing is difficult, give

oxygen. Consult a physician.

In case of skin contact Immediately remove contaminated clothing and wash affected area with water for

at least 15 minutes. Ensure contaminated clothing is washed before re-use.

Seek medical advice /attention depending on the severity.

In case of eye contact Immediately irrigate with copious quantity of water for at least 15 minutes.

Eyelids to be held open. In all cases of eye contamination it is a sensible

precaution to seek medical advice.

If swallowed Rinse mouth thoroughly with water immediately, repeat until all traces of

product have been removed. Give water to drink. DO NOT INDUCE VOMITING. Seek

medical advice if symptoms persist.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Small fire: Use dry chemical, CO2 or water spray.

Large fire: Use water spray, fog or foam.

Specific hazards arising from the chemical

Hazards from Combustion Products: May librate toxic and /or poisonous fumes such as oxides of carbon and nitrogen and hydrogen chloride gas.

May burn but do not ignite readily. Containers may explode when heated. Runoff may pollute waterways. Fire will produce irritating, poisonous and/or corrosive gases.

Special protective actions for fire-fighters

Wear SCBA and structural firefighter's uniform.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Take off immediately all contaminated clothing. Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms.

Wear protective clothing specified for normal operations (see Section 8)

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Methods and materials for containment and cleaning up

Sweep up (avoid generating dust) and remove to a suitable, clearly labelled container for disposal in accordance with local regulations. Seek expert advice on handling and disposal.

SECTION 7: Handling and storage

Precautions for safe handling

Wash hands and face thoroughly after working with material. Use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid generation or accumulation of dusts. Avoid prolonged or repeated contact with skin and eyes .

Conditions for safe storage, including any incompatibilities

Storage Temperatures: Store at room temperature (15 to 25 °C recommended).

Store away from oxidizing agents. sources of heat or ignition. Keep away from direct sunlight and other Keep container tightly closed and dry

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

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.

Skin protection

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Body protection

Footwear: Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

Body Protection: Clean clothing or protective clothing should be worn, preferably with and apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Respiratory protection

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.

SECTION 9: Physical and chemical properties

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Basic physical and chemical properties

Physical state

Appearance Dark green powder or greenish glistening pieces having a

metallic luster. No data available.

No data available.

No data available.

Solid

Color No data av Odor Odourless.

Odor threshold No data available.

Melting point/freezing point 173 °C

Melting point/freezing point

173 °C

Boiling point or initial boiling point and boiling range

No data available.

Flammability

Lower and upper explosion limit/flammability limit

Flash point No data available. Explosive properties No data available. Auto-ignition temperature No data available.

Decomposition temperature

No data available.

Oxidizing properties

No data available.

pH (10 g/L, aqueous solution, 20 °C): 2.5 - 3.5

Kinematic viscosity

No data available.

Solubility in Water: Soluble (50 g/L @ 27 $^{\circ}$ C). Solubility in

Organic Solvents: Insoluble in diethyl ether.

Partition coefficient n-octanol/water (log value)

Vapor pressure

Evaporation rate

No data available.

No data available.

Density and/or relative density

Relative vapor density

Particle characteristics

Specific Gravity: 1.19

No data available.

No data available.

Supplemental information regarding physical hazard classes

No data available.

Further safety characteristics (supplemental)

No data available.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions of storage and handling.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Hazardous Polymerization: Will not occur.

Conditions to avoid

Exposure to moisture.

Avoid storing in direct sunlight and avoid extremes of temperature.

Incompatible materials

Strong oxidizing agents, strong reducing agents and strong acids.

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Hazardous decomposition products

May liberate toxic and/ or poisonous fumes including oxides of carbon and nitrogen and hydrogen chloride gas.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Ingestion: Harmful if swallowed. Ingestion of the material causes damage to mucous membranes and gastrointestinal tract. Symptoms include of nausea, vomiting, diarrhea, pain, headaches, dizziness. Irreversible damage is possible.

Inhalation: Inhalation of dust may cause irritation to the mucous membranes, and respiratory tract. Symptoms include of coughing and dyspnoea.

Skin corrosion/irritation

May cause irritation and stains to the skin.

Serious eye damage/irritation

Severe eye irritation. Risk of serious damage to eyes. This product contains a cationic dye which may cause permanent injury to the cornea and conjunctiva in documented exposure cases with human or rabbit eyes.

[8N] Serious eye damage/irritation: Eye Damage/Irritation: Category 1 H318 Causes serious eye damage.

Respiratory or skin sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Carcinogenicity: Category 2 H351 Suspected of causing cancer.

Reproductive toxicity

Not classified based on available information.

Specific target organ toxicity (STOT) - single exposure

Not classified based on available information.

Specific target organ toxicity (STOT) - repeated exposure

Not classified based on available information.

Aspiration hazard

Not classified based on available information.

Additional information

Chronic Effects: Possible risks of irreversible effects.

Long-term feeding studies in rats and mice revealed an increased incidence of tumors in different target organs. Results of long-term studies available suggest that exposure to crystal violet/gentain violet may lead to irreversible damage. Postitive in-vitro genetic toxicity findings also point in a negative direction. However, the data available is insufficient to classify the dye as carcinogenic in humans. For some minor components, animal experiments performed in conditions comparable with workplace situations show a potential for carcinogenicity in humans. Possible mutagenic effect on humans but these results require futher clarification.

SECTION 12: Ecological information

Toxicity

Highly toxic for aquatic organisms. the aquatic environment.

May cause long-term adverse effects in

Bioaccumulative potential

Not readily biodegradable.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Sewage disposal

Not readily biodegradable.

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)

UN Number: 3077

Class: 9

Packing Group: III

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CRYSTAL VIOLET)

Hazchem emergency action code (EAC)

2X

IMDG

UN Number: 3077

Class: 9

Packing Group: III

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CRYSTAL VIOLET)

IATA

UN Number: 3077

Class: 9

Packing Group: III

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CRYSTAL VIOLET)

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: NS

SECTION 16: Other information

Further information/disclaimer

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

Preparation information

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'

Safe Work Australia, 'National Code of Practice fot the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.

Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.

Safe Work Australia, Workplace Exposure Standards for Airbourne Contaminants, December 2019

Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)