GENTIAN VIOLET  
CAS No 548-62-9  

MATERIAL SAFETY DATA SHEET  
SDS/MSDS

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers
   Product name : Gentian Violet
   CAS-No. : 548-62-9

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet
   Company : Central Drug House (P) Ltd
   7/28 Vardaan House
   New Delhi -110002
   INDIA
   Telephone : +91 11 49404040
   Email : care@cdhfinechemical.com

1.4 Emergency telephone number
   Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

SECTION 2: Hazards identification

2.1 Classification according to Regulation (EC) No 1272/2008
   Acute toxicity, Oral (Category 4), H302
   Serious eye damage (Category 1), H318
   Carcinogenicity (Category 2), H351
   Acute aquatic toxicity (Category 1), H400
   Chronic aquatic toxicity (Category 1), H410

   For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements
   Labelling according Regulation (EC) No 1272/2008
   Pictogram
   ![Pictogram]

   Signal word : Danger
   Hazard statement(s): 
   H302  Harmful if swallowed.
   H318  Causes serious eye damage.
2.3 Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances
Synonyms : Basic Violet 3
            Methyl Violet 10B
            Hexamethyleneparosaniline chloride
            Gentian Violet
            Crystal Violet

Formula : C_{29}H_{30}ClN_{3}
Molecular weight : 407.98 g/mol
CAS-No. : 548-62-9
EC-No. : 208-953-6
Index-No. : 612-204-00-2

Hazardous ingredients according to Regulation (EC) No 1272/2008
Component Classification Concentration
C.I. Basic violet 3 Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)
CAS-No. 548-62-9 Acute Tox. 4; Eye Dam. 1; <= 100 %
EC-No. 208-953-6 Carc. 2; Aquatic Acute 1;
Index-No. 612-204-00-2 Aquatic Chronic 1; H302, H318, H351, H400, H410
M-Factor - Aquatic Acute: 10

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
4.2 **Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 **Indication of any immediate medical attention and special treatment needed**
No data available

SECTION 5: Firefighting measures
5.1 **Extinguishing media**
**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 **Special hazards arising from the substance or mixture**
Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas

5.3 **Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 **Further information**
No data available

SECTION 6: Accidental release measures
6.1 **Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 **Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 **Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 **Reference to other sections**
For disposal see section 13.

SECTION 7: Handling and storage
7.1 **Precautions for safe handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 **Conditions for safe storage, including any incompatibilities**
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Light sensitive.
Storage class (TRGS 510): Non Combustible Solids

7.3 **Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection
8.1 **Control parameters**

8.2 **Exposure controls**
**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment

Eye/face protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form: powder
   Colour: dark green

b) Odour No data available

c) Odour Threshold No data available

d) pH 2.5 - 3.5 at 10 g/l at 20 °C

e) Melting point/freezing point Melting point/range: 205 °C - dec.

f) Initial boiling point and boiling range No data available

g) Flash point No data available

h) Evaporation rate No data available

i) Flammability (solid, gas) No data available

j) Upper/lower flammability or explosive limits No data available

k) Vapour pressure No data available

l) Vapour density No data available

m) Relative density 1.190 g/cm3 at 20 °C

n) Water solubility 50 g/l at 27 °C

o) Partition coefficient: n-octanol/water log Pow: 1.172 at 25 °C
p) Auto-ignition temperature > 190 °C
q) Decomposition temperature No data available
r) Viscosity No data available
s) Explosive properties No data available
t) Oxidizing properties No data available

9.2 Other safety information
- Bulk density 220 - 400 kg/m³
- Surface tension 44.2 mN/m

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Strong oxidizing agents

10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
- LD50 Oral - Mouse - 96 mg/kg(C.I. Basic violet 3)
- LD50 Oral - Rabbit - 150 mg/kg(C.I. Basic violet 3)
- LD50 Intraperitoneal - Rat - 8.9 mg/kg(C.I. Basic violet 3) LD50
- Intraperitoneal - Mouse - 5.1 mg/kg(C.I. Basic violet 3) LD50
- Intraperitoneal - Rabbit - 5 mg/kg(C.I. Basic violet 3) LD50
- Intrudodenal - Rabbit - 160 mg/kg(C.I. Basic violet 3)

Skin corrosion/irritation
No data available(C.I. Basic violet 3)

Serious eye damage/eye irritation
Severe eye irritation(C.I. Basic violet 3)

Respiratory or skin sensitisation
No data available(C.I. Basic violet 3)
**Germ cell mutagenicity**

Human (C.I. Basic violet 3)
HeLa cell
DNA inhibition
Human (C.I. Basic violet 3)
HeLa cell
Cytogenetic analysis
Human (C.I. Basic violet 3)
lymphocyte
Cytogenetic analysis
Rat (C.I. Basic violet 3)
Liver
DNA inhibition
Mouse (C.I. Basic violet 3)
lymphocyte
DNA damage
Hamster (C.I. Basic violet 3)
ovary
Cytogenetic analysis
Mammal (C.I. Basic violet 3)
lymphocyte
DNA damage
Mammal (C.I. Basic violet 3)
Other cell types
Cytogenetic analysis
Non-mammalian (C.I. Basic violet 3)
Other cell types
Cytogenetic analysis
Result: Equivocal evidence.
Histidine reversion (Ames)

**Carcinogenicity**

Limited evidence of a carcinogenic effect. (C.I. Basic violet 3)

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

No data available (C.I. Basic violet 3)

**Specific target organ toxicity - single exposure**

No data available (C.I. Basic violet 3)

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available (C.I. Basic violet 3)

**Additional Information**

RTECS: BO9000000

prolonged or repeated exposure can cause:, Nausea, Headache, Vomiting (C.I. Basic violet 3)
SECTION 12: Ecological information

12.1 Toxicity
Toxicity to daphnia and other aquatic invertebrates
EC50 - Daphnia magna (Water flea) - 0.35 mg/l - 48 h (C.I. Basic violet 3) (OECD Test Guideline 202)
Toxicity to algae
EC50 - Pseudokirchneriella subcapitata - 0.42 mg/l - 72 h (C.I. Basic violet 3) (OECD Test Guideline 201)

12.2 Persistence and degradability
Biodegradability
Result: 10 % - Not readily biodegradable.

Ratio BOD/ThBOD
0.12 % (C.I. Basic violet 3)

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available (C.I. Basic violet 3)

12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

Contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number
ADR/RID: 3077
IMDG: 3077
IATA: 3077

14.2 UN proper shipping name
ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (C.I. Basic violet 3)
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (C.I. Basic violet 3)
IATA: Environmentally hazardous substance, solid, n.o.s. (C.I. Basic violet 3)

14.3 Transport hazard class(es)
ADR/RID: 9
IMDG: 9
IATA: 9

14.4 Packaging group
ADR/RID: III
IMDG: III
IATA: III

14.5 Environmental hazards
ADR/RID: yes
IMDG Marine pollutant: no
IATA: yes

14.6 Special precautions for user

Further information
EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.
SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Authorisations and/or restrictions on use

15.2 Chemical safety assessment
For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H302 Harmful if swallowed.
H318 Causes serious eye damage.
H351 Suspected of causing cancer.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Further information
The above information is believed to be correct but does not purport to be all inclusive and shall be
used only as a guide. The information in this document is based on the present state of our knowledge
and is applicable to the product with regard to appropriate safety precautions. It does not represent any
guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be
held liable for any damage resulting from handling or from contact with the above product. See
www.cdhfinechemical.com for additional terms and conditions of sale.