

Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCES/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1. Product Identifiers**
Product Code(s) HB0742
Product Name Crystal Violet
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Recommended use For research use only – Not for human use
Uses advised against No information available
- 1.3. Details of the supplier of the safety data sheet**
Supplier

HelloBio Ltd
Unit 3 IO Centre
Cabot Park
Moorend Farm Avenue
Avonmouth
Bristol
BS 11 0QL
UK
Tel: +44 (0)117 318 0505
Fax: +44 (0)1179 811 601

For further information, please contact: technicalsupport@hellobio.com
- 1.4. Emergency Telephone number**
Emergency telephone - Tel: +44 (0)117 318 0505

2. HAZARDS IDENTIFICATION

- 2.1. Classification of the substance or mixture**
GHS/CLP – REGULATION (EC) No 1272/2008
- | | |
|-----------------------------------|------------|
| Acute oral toxicity | Category 4 |
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 1 |
| Carcinogenicity | Category 2 |
| Reproductive toxicity | Category 2 |
| Acute aquatic toxicity | Category 1 |
| Chronic aquatic toxicity | Category 1 |
- DSD/DPD – Classification according to EU Directives 67/548/EEC or 1999/45/EC**

T - Toxic

R23/24/25 – Toxic by inhalation, in contact with skin and if swallowed

2.2.

Label Elements



Signal Word

Danger

Hazard Statements

H302 - Harmful if swallowed

H315 - Causes skin irritation

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

Precautionary Statements

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician 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

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P332 + P313 - If skin irritation occurs: Get medical advice/ attention

P308 + P313 - IF exposed or concerned: Get medical advice/ attention

P280 - Wear protective gloves/ eye protection/ face protection

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P201 - Obtain special instructions before use

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

P330 - Rinse mouth

P273 - Avoid release to the environment

P391 - Collect spillage

P501 - Dispose of contents/ container to an approved waste disposal plant

P405 - Store locked up

P362 - Take off contaminated clothing and wash before reuse

Other hazards

Caution – substance not yet completely tested

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1.

Substances

Product Name: Crystal Violet

Synonyms: Basic Violet 3, Gentian Violet, Hexamethylpararosaniline chloride, Methyl Violet 10B

Formula: $C_{25}H_{30}N_3Cl$ Molecular Weight: 407.99

CAS Number 548-62-9

EC-No. 208-953-6

Index-No 612-204-00-2

4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice	If symptoms persist, call a physician.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
Ingestion	Rinse mouth. If symptoms persist, call a physician
Inhalation	Move to fresh air. If symptoms persist, call a physician.

4.2. Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3. Indication of immediate medical attention and special treatment needed

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

5. FIRE-FIGHTING 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

In combustion, may emit toxic fumes.

5.3. Precautions for fire-fighters

Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Do not take action without suitable protective clothing – see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapours, mist, dust or gas.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and materials for containment and cleaning up

Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.

6.4. Reference to other sections

For required PPE see section 8. For disposal see section 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

7.2. Conditions for safe storage, including any incompatibilities.

Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use. Recommended storage temperature: Store at RT

7.3. Specific end uses

Use in a laboratory fume hood where possible. Refer to employer's COSHH risk assessment.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2. Exposure controls

Appropriate engineering controls

Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

Personal protective equipment

Eye/face protection

Use appropriate safety glasses.

Skin protection

Use appropriate chemical resistant gloves (minimum requirement use standard BS EN 374:2003). Gloves should be inspected before use. Wash and dry hands thoroughly after handling.

Body protection

Wear appropriate protective clothing.

Respiratory protection

If risk assessment indicates necessary, use a suitable respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Green solid	Vapour pressure	No data available
Odour	No data available	Vapour density	No data available
Odour threshold	No data available	Relative density	No data available
pH	No data available	Solubility(ies)	Water
Melting/freezing point	No data available	Partition coefficient	No data available
Boiling point/range	No data available	Auto-ignition temperature	No data available
Flash Point	No data available	Decomposition temperature	No data available
Evaporation rate	No data available	Viscosity	No data available
Flammability (solid, gas)	No data available	Explosive properties	No data available
Upper/lower flammability or explosive limits	No data available	Oxidising properties	No data available

- 9.2. **Other safety information**
No data available

10. STABILITY AND REACTIVITY

- 10.1. **Reactivity**
Stable under recommended transport or storage conditions.
- 10.2. **Chemical Stability**
Stable under recommended storage conditions.
- 10.3. **Possibility of hazardous reactions**
Hazardous reactions will not occur under normal transport or storage conditions.
- 10.4. **Conditions to avoid**
Heat, moisture
- 10.5. **Incompatible materials**
Strong acids/alkalis, strong oxidising/reducing agents.
- 10.6. **Hazardous decomposition products**
Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Phosphorous oxides.

11. TOXICOLOGICAL INFORMATION

- 11.1. **Information on toxicological effects**
- Acute Toxicity**
- | | |
|---------------------|---|
| Inhalation | No Information available |
| Eye contact | No Information available |
| Skin contact | No Information available |
| Ingestion | LD50 Oral - Rat - 420 mg/kg
Remarks: (RTECS) Acute toxicity estimate Oral - 420 mg/kg (Calculation method) |
- Chronic toxicity**
- | | |
|------------------------------|--------------------------|
| Corrosivity | No Information available |
| Sensitization | No Information available |
| Neurological effects | No Information available |
| Reproductive toxicity | No Information available |
| Mutagenic effects | No Information available |
| Target Organ Effects | No Information available |

12. ECOLOGICAL INFORMATION

- 12.1. **Toxicity**
Toxicity to fish
- LC50 - Pimephales promelas (fathead minnow) - 0.13 mg/l - 96 h Remarks: The value / statement given is based on a (Q)SAR approach

Toxicity to daphnia and other aquatic invertebrates

static test EC50 - Daphnia magna (Water flea) - > 0.24 - < 0.5 mg/l - 48 h (OECD Test Guideline 202)

Toxicity to algae

static test ErC50 - Pseudokirchneriella subcapitata (green algae) - > 0.2 - < 0.8 mg/l - 72 h (OECD Test Guideline 201)

Toxicity to bacteria

EC50 - Bacteria - 10 - 100 mg/l Remarks: (External MSDS)

12.2. Persistence and degradability

aerobic - Exposure time 28 d Result: 3.6 % - Not readily biodegradable. (OECD Test Guideline 301F)
Ratio BOD/ThBOD 0.12 %

12.3. Bioaccumulative potential

No Information available

12.4. Mobility in soil

No Information available

12.5. Results of PBT and vPvB assessment

No Information available

12.6. Other adverse effects

No Information available

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Other information

According to the European Waste Catalogue. Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

14. TRANSPORT INFORMATION

ADR

Proper shipping name

Excepted Quantity

Environmentally hazardous substance, solid, n.o.s.
(Crystal Violet)

Hazard Class

9

UN/ID No

3077

Packing Group

III

IATA

Proper shipping name

Excepted Quantity

Environmentally hazardous substance, solid, n.o.s.
(Crystal Violet)

Hazard Class	9
UN/ID No	3077
Packing Group	III
DOT	Excepted Quantity
Proper shipping name	Environmentally hazardous substance, solid, n.o.s. (Crystal Violet)
Hazard Class	9
UN/ID No	3077
Packing Group	III

15. REGULATORY INFORMATION

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
No information available
- 15.2. Chemical Safety Assessment**
No information available

16. OTHER INFORMATION

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless stated in the text.